1-1-1999

Barbadian teachers' personal practical knowledge about advocated pedagogic practices used in the education of the under-fives

Sonja M. Anderson
Edith Cowan University

Follow this and additional works at: https://ro.ecu.edu.au/theses

Part of the Educational Methods Commons

Recommended Citation

This Thesis is posted at Research Online.
https://ro.ecu.edu.au/theses/1259
Barbadian teachers' personal practical knowledge about advocated pedagogic practices used in the education of the under-fives

Sonja M. Anderson

Edith Cowan University

Recommended Citation
You may print or download ONE copy of this document for the purpose of your own research or study.

The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.

- A reproduction of material that is protected by copyright may be a copyright infringement. Where the reproduction of such material is done without attribution of authorship, with false attribution of authorship or the authorship is treated in a derogatory manner, this may be a breach of the author’s moral rights contained in Part IX of the Copyright Act 1968 (Cth).

- Courts have the power to impose a wide range of civil and criminal sanctions for infringement of copyright, infringement of moral rights and other offences under the Copyright Act 1968 (Cth). Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.
USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
BARBADIAN TEACHERS' PERSONAL PRACTICAL KNOWLEDGE
ABOUT ADVOCATED PEDAGOGIC PRACTICES USED IN THE
EDUCATION OF THE UNDER-FIVES

By

Sonja Myrtle Sandra Anderson
T. Cert. Erd. & UWI, B.A. UWI

A Thesis Submitted in Fulfillment of the
Requirements for the Award of
Doctor of Philosophy
at the
Faculty of Education,
Edith Cowan University

September 1999
Declaration

I certify that this thesis does not, to the best of my knowledge and belief:

- incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education;

- contain any material previously published or written by another person except where due reference is made in the text;

- or contain any defamatory material.

Signature: ____________________________

Date: 23rd September 1999
Abstract

This study investigated the personal practical knowledge of twenty-one Barbadian teachers in relation to a range of pedagogic practices advocated for use in the education of children under five years of age. The investigation of this knowledge was based on an interpretative perspective. The conceptual underpinning was framed by Personal Construct Psychology (Kelly, 1955), and its methodology, the repertory grid technique. The grid was formulated and used in a sample of schools with under-fives. Findings were clarified, confirmed and elaborated by the use of in-depth interviews conducted with teachers in their classroom settings.

The findings revealed that teachers construed pedagogic practices from two perspectives. First, those concerned with the total development of the child, and second, those which emphasized cognitive development. The factors associating the practices and the perspectives were presented under five major themes: Consideration of the Child; Benefits to the Under-fives; Classroom Experiences; Traditional Academic Focus; and Teacher's versus Child Dominance.

Eclectic constructions and uses of teaching practices were clearly evident. Individual choices were varied and at times conflicting; they derived from the teachers' own construct systems, their anticipation of events in early childhood education, and their technical, cultural and theoretical knowledge.

The implications and recommendations made in this study provide the basis for the development of coherent teaching strategies for early childhood education in Barbados.
Acknowledgments

I welcome the opportunity to thank everyone who contributed to the completion of this thesis. I am particularly indebted to my supervisors Dr. Caroline Barratt-Pugh and Dr. Tony Fetherston for their invaluable wisdom, guidance, support, suggestions and patience throughout the writing of this research.

I am especially grateful to all those lecturers at the Edith Cowan University (ECU) who gave up their precious time to discuss and suggest solutions to problems or offered encouragement during the process of the research. Special thanks to Dr. Lorraine Corrie who gave up teaching time to allow me to pilot a repertory grid technique with her in-service teachers.

I also extend special thanks to my colleagues in early childhood education at Edith Cowan University, and the Director and teachers at the Edith Cowan Day-care Centre who took time to participate in the pre-testing of the grids.

I am also indebted to the Ministry of Education in Barbados and principals of primary, infant and nursery schools for granting permission to conduct this research. Extra special thanks to the 21 teachers in Barbados who tolerated me in their classrooms and so good-naturedly shared their personal practical knowledge about the under-fives and their education.

I am also grateful to typist Sandra Hoyte, transcribers Denise Alleyne and Beverly Jones, and proof reader Grace Haynes, for their part in the completion of this research.
Finally, I wish to thank my family, especially Winston, my two daughters Anessa and Aleisha, and my son Anquan, for their unfailing support, sacrifice and patience throughout the period of study. It is to my three children and all the under-fives in the education system in Barbados that this study is dedicated.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ABSTRACT</th>
<th>iii</th>
</tr>
</thead>
<tbody>
<tr>
<td>DECLARATION</td>
<td>iv</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>viv</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xvi</td>
</tr>
</tbody>
</table>

**CHAPTER ONE**

Introduction to the Study

Introduction 1

Background to the study

Physical Characteristics of Barbados 2

Social and Political History of Barbados 3

A Brief History of the Development of Education in Barbados 4

An Overview of the various levels in the Education System in Barbados 7

Early Childhood Education (ECE) in Barbados 10

The Problem and Significance of the Study 16

Aims of the Study 19

The Research Questions 20

Operational Definitions 21

Thesis Outline 22

**CHAPTER TWO**

Literature Review

Introduction 25

Pedagogic Practices in ECE 26

Developmentally appropriate practices in ECE 28

Defining Personal Practical Knowledge 30

Components of Personal Practical Knowledge 31

Uncovering Personal Practical Knowledge 34

Difficulties of Accessing Teachers' Personal Practical Knowledge 36

Importance of Research about Teachers' Personal Practical Knowledge 40

Research on Teachers' Personal Practical Knowledge 42

Summary 46

Conclusion 46

**CHAPTER THREE**

Theoretical Framework

Introduction 47

The Interpretive Paradigm 47
Personal Construct Psychology (PCP) 50
Theoretical and Philosophical Assumptions 51
Conceptual Framework of the Study 55
Summary 57

CHAPTER FOUR 58
Methodology 58
Introduction 58
Methods of investigation 58
Phases of the Study 60
The Preparatory Phase of the Study 60
Selecting of the Sample 61
Instruments used in the Study 63
The Researcher as an Instrument 63
An Introduction to the Repertory Grid Technique 64
Constructs 65
Nature of the Elements used in the Study 66
Elicitation of Constructs 67
Elicitation of Contrasting Poles 68
Rating the Grids 69
Analysis of the Grid 71
Advantages of the Repertory Grid Technique 75
Identification of the Elements used in the Study 76
Pre-testing the Elicitation of the Constructs 80
Survey 82
An overview of Depth Interview 83
Preparation for the Depth Interview 84
Data Collection Process 85
Pre-testing the Repertory Grid Technique and 85
Depth Interview in Barbados 85
Data Collection process in Barbados 87
Implementing a “full form” Repertory 87
Grid Technique 87
Eliciting the Teacher’ Constructs 88
Obtaining the Opposite Pole 88
Implementing the Rating 90
Grid Analysis 94
Survey of Background Information 96
Depth Interview Procedure 96
Time Span 100
Data Analysis 102
Validity and Reliability of the Study 103
Reliability of the Study 104
External Reliability 107
Researcher’s Roles 108
Informants’ Selection 108
Social Context 109
Data Collection a. d Analysis Strategies 110
Construing a Child Initiated approach 157
Construing an Integrated approach 158
Construing a Child Centred approach 159
Construing an Informal approach 161
Construing a Free Choice approach 163
Construing a Concrete approach 166
Construing of teaching Individually 167
Construing Small Groups approach 168
Construing Real Life Objects 169
Construing a Separate Subjects approach 170
Construing an Academic Focus approach 171
Construing a Whole Group approach 174
Construing Abstract Materials 175
Construing a Formal approach 176
Construing a Structured approach 178
Construing a Teacher Directed approach 179
Construing a Parent Involvement approach 182
Summary 182
Conclusion 185

CHAPTER EIGHT 186
The Teachers’ Personal Practical Knowledge about the Advocated Pedagogic Practices 186
Introduction 186
Presentation of Findings 187
Consideration of the Child 190
Perceptions of the Under-fives 190
How Under-fives Learn 192
Attention Spans of the Under-fives 194
Major Goals for the Under-fives 195
Social Development 196
Emotional Development 197
Cognitive Development and goals 198
Physical Development 200
Summary 201
Home Environment of the Under-fives 202
Parents At Work 202
Developmental Experiences at Home 204
Advantages of An Early Start 207
Early Socialisation to School 208
Early Exposure to Material 209
Transition to Formal School 210
Development of Oral Language 213
Inadequacies of Private Schools 216
Summary 217
School Environment for the Under-fives 218
Conditions of Acceptance in the Primary/Infants Settings 218
### Expectation of Parents

Summary 326

### The Expectations of Teachers and Administration

Summary 330

### Traditional BSSCEE

Summary 334

### Summary of Traditional Academic Focus

**Teacher's versus Child's Domination**

**Teachers' Dominance**

Summary 342

**The Role of the Child**

Summary 347

**Changing Attitudes to the Roles of the Teacher and Child**

Summary 351

**Acceptance of teachers' role and knowledge**

Summary 352

**Summary of Teacher's versus Child's Domination**

Summary to the Chapter 354

Conclusion to the Chapter 357

### CHAPTER NINE

**Discussion of the Findings: Answering the Research Questions**

**Introduction** 359

**Presentation of Findings** 360

**Elicited Constructs and the Implications for Pedagogical Practices**

The association between the Constructs and the Elements 360

**Construing the Meanings of the Practices**

Underlying Factors and their Influences on the use of the practices 362

**Summary of the Main Findings** 376

**Discussion of underlying factors** 377

**The elicited constructs** 378

**Anticipating events** 379

**Variations in Construing** 382

**Individuality in Construing** 382

**Similarities in Construing** 384

**The Relationship of the Practices to the Under-fives** 385

**Experimenting with the practices** 387

**Composition of knowledge** 390

**Technical Cultural Knowledge** 390

**Theoretical Knowledge** 392

**Eclectic Construing of the practices** 395

**Summary** 400

Summary to the Chapter 401

Conclusion to the Chapter 407
## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pattern of Enrolment of under-fives in Government School in four-year intervals</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>A Summary of the Research Questions and the Methods Used for Each Question</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>The Time Phase and Methods Used in the Collection of Data about the Teacher’s Practical Knowledge</td>
<td>101</td>
</tr>
<tr>
<td>4</td>
<td>Summary of Schools by Types and Locations</td>
<td>121</td>
</tr>
<tr>
<td>5</td>
<td>Summary of the Time Schedules According to the Type of Schools and Given Breaks</td>
<td>125</td>
</tr>
<tr>
<td>6</td>
<td>The Age Ranges of Nursery Classes in the Study According to Types of Schools and Age Range of Under-fives</td>
<td>126</td>
</tr>
<tr>
<td>7</td>
<td>The Number of Under-fives in the Three Types of Schools According to Age Group</td>
<td>128</td>
</tr>
<tr>
<td>8</td>
<td>An Overview of the Number of Female Teachers by Age and School</td>
<td>129</td>
</tr>
<tr>
<td>9</td>
<td>An Overview of Teachers by Qualifications and Types of Schools</td>
<td>131</td>
</tr>
<tr>
<td>10</td>
<td>Teaching Experiences of the Teachers by Years of Service and Types of School</td>
<td>132</td>
</tr>
<tr>
<td>11</td>
<td>Number of Constructs Elicited from the Twenty-one Teachers Using a Repertory Grid Technique</td>
<td>141</td>
</tr>
<tr>
<td>12</td>
<td>The Frequencies of Constructs in Each Construct Groups Derived from the Elicited Constructs of the Twenty-one Teachers and Established by the Researcher</td>
<td>143</td>
</tr>
<tr>
<td>13</td>
<td>An Overview of the Number of Elicited Constructs Associated with the Supplied Elements</td>
<td>153</td>
</tr>
<tr>
<td>14</td>
<td>The organisation of this chapter in terms of the five major themes and sub-themes</td>
<td>189</td>
</tr>
</tbody>
</table>
The Teachers' Construing of the Pedagogic Practices Used in the Education of the Under-fives
List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Map of Barbados</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>A students' constructs regarding water</td>
<td>70</td>
</tr>
<tr>
<td>3</td>
<td>Principal components display of a grid</td>
<td>75</td>
</tr>
<tr>
<td>4</td>
<td>Repertory grid showing the ratings of the supplied elements on elicited constructs</td>
<td>91</td>
</tr>
<tr>
<td>5</td>
<td>Principal components analysis of elements rated on elicited constructs</td>
<td>95</td>
</tr>
<tr>
<td>6</td>
<td>Mary’s repertory grid showing the ratings of the supplied elements on elicited constructs</td>
<td>139</td>
</tr>
<tr>
<td>7</td>
<td>Joan’s repertory grid showing the ratings of the supplied elements on elicited constructs</td>
<td>140</td>
</tr>
<tr>
<td>8</td>
<td>Mary’s principal components analysis of supplied elements rated on elicited constructs</td>
<td>150</td>
</tr>
<tr>
<td>9</td>
<td>Joan’s principal components analysis of supplied elements rated on elicited constructs</td>
<td>152</td>
</tr>
<tr>
<td>10</td>
<td>An overview of the teachers’ constructions of their Personal Practical Knowledge about the Pedagogic Practices</td>
<td>407</td>
</tr>
</tbody>
</table>
CHAPTER ONE

Introduction to the study

Introduction

This chapter details the background of the study. It provides descriptions of the physical, social and political history, and the educational contexts in which twenty-one Barbadian teachers commented upon seventeen pedagogic practices advocated in the literature for use in the education of under-fives. The problem under investigation and the significance of the study are described. The aims of the study are outlined and this is followed by the research questions. Operational definitions used in the study are explained and the chapter concludes with an overview of the areas covered in the other chapters.

Background to the Study

This study was conducted in Barbados. An overview of the physical, social and political history of the island is essential to understanding the intellectual matrix within which the teachers' considerations of the pedagogic practices were formed. This section provides that review.
Physical characteristics of Barbados

Barbados, with a GNP per capita of US $6,560, is classified as an upper middle economy, developing country (World Development Report, 1997). The Island is the most easterly of all the islands in the Caribbean region. It is about 34 km long and 22 km wide and has a population of approximately 260,000 people on its 166 sq miles of land. The island is divided into 11 sections of various sizes, called Parishes, with the capital Bridgetown located in the Parish of St. Michael. St. Michael and the other 10 Parishes are identified in Figure 1. Teachers were chosen from all 11 Parishes. In this study, the Parish of St. Michael, which has the largest number of
primary schools with nursery classes and the four nursery schools, is labeled the city and urban district, and the other 10 parishes the rural districts.

Social and political history of Barbados

The first inhabitants of the Island were tribes of Amerindians comprised of Caribs, after whom the region is named, and the Arawaks. It is suspected that the Caribs drove the Arawaks off the Island and then they abandoned it themselves by the early 1600's. The reason for their departure is still unknown but some Amerindians were on the Island when the Portuguese visited around 1537 on their way to Brazil. The sailors called the island Los Barbados after the ficus trees whose aerial roots looked like beards.

When the English Captain John Powell arrived in 1625, he found the Island uninhabited and claimed it for King James 1 of England. Powell returned to England along with his merchant employer Sir William Courteen. They told such interesting stories of their findings that eighty settlers were sent to inhabit the Island. The settlers arrived in February 1627 at the sight that is now known as Holetown in the Parish of St. James. The population grew dramatically over the next two decades because of political unrest in England due to the struggle between Oliver Cromwell and Charles 1. In addition, the introduction of sugar cane as the Island's main crop brought slaves from Africa.

Historically, Barbados is an English speaking Island whose cultural roots are grounded in over 300 years of British heritage and traditions. Barbados gained the title "Little England" because of the acceptance of British law and traditions. The first Parliament was held in 1639 making Barbados
unique among the other islands in the Caribbean because of its unbroken
British rule from its beginnings. An independent society began to emerge
with the emancipation of slaves in 1834, enfranchisement of women in 1944
and universal adult suffrage in 1951. A two party system and a cabinet
government developed during the 1950s as the Island prepared for
independence, which was granted on November 30, 1966. The Queen of
Great Britain is also the Queen of Barbados and is represented by the
Governor General. Political stability is rooted in the bicameral legislature that
consist of the House of Assembly with 28 elected members and the Senate
with 21 appointed members. The Prime Minister is usually the leader of the
majority party in the Assembly and he selects a cabinet from his party
members in the legislature.

A brief history of the development of education in Barbados

The booklets *Education in Barbados* (The Ministry of Education and
Culture, 1990) and White paper on education reform: Preparing for the
twenty-first century (Ministry of Education, 1995) noted many salient features
about the development of education. These booklets were also the sources
from which the problem for this study was derived.

Two planters, who donated land and money for the venture, introduced
formal education in Barbados in about 1686 (Ministry of Education and
Culture, 1990). These schools were established for the education of the “poor
white” children. No provision was made for the education of the slaves and
their children who had been transported from various parts of Africa and who
spoke different languages. The planters considered it dangerous to teach the
slaves a common language as this could lead to subversion and the destruction of their property (Ministry of Education and Culture, 1990). The first school for "colored slave boys" was built in 1818. The imminent emancipation of slaves along with the result of contemporary developments in England began to stir public interest in elementary education for all.

A step towards education of slave children was made when the Act for the Abolition of Slavery was approved by the Legislature in 1834. Slaves were not entirely free as they were apprenticed to their masters for a further four years. Estate schools and church schools were set up to provide for the education of the children. During the immediate post-emancipation years the main focus of education was that of providing "the children of the emancipated slaves with the 'elements' of education which were basically the 'three Rs' - Reading, Writing and Arithmetic" (Ministry of Education, 1995, p. 1). The first Education Act was passed in 1850 and the second in 1858.

The elementary education, which was provided for children aged between 5 and 11, of emancipated slaves, was investigated and severely criticised by Commissions in 1894 and 1907 (Ministry of Education, 1995, p. 1). Issues such as "a lack of definite policy, elementary education not meeting the needs of the children, and the first grade schools being severely academic and having little contact with reality" (p. 1) were identified. The Commissions also stated that little was done to improve the education system during these periods. In 1932 the Marriott-Mayhew Commission investigated the educational services of the colony (Ministry of Education, 1995, p. 1). This commission reported among other things that there was a need for
“reorganization of the schools and a review of the curriculum to bring education into close touch with the needs of the students and the times” (Ministry of Education, 1995, p. 1). This report resulted in the introduction of modern secondary schools, which made secondary education accessible to all students between the ages of 11 and 16 years.

The next forty years saw efforts made by successive governments for the provision of education for all. The Ministry also reported that the introduction of schools for all signalled the Government’s intention that the students should be provided with a well-rounded education. The problem noted over the years, however, was that the standard in these schools was that of “learning by rote” (Ministry of Education, 1995, p. 1) and the present Government noted the need to reform this process.

In a commitment to reforming education, the Ministry of Education identified the philosophy underpinning the education system as centering on the fundamental principle that "human resource development is the key to social, economic and political growth" (Ministry of Education, 1995, p.1). The Ministry of Education argued that in order to keep pace with “economic and technological change... the educational system must now shift its emphasis from ‘learning by rote’ to causing children to think critically, so that they may participate in the higher value-added parts of the knowledge-based and skill-intensive industry” (Ministry of Education, 1995, p. 2). The Ministry of Education (1995) further argued that the move away from rote to critical thinking involved a move towards a child centred programme that takes cognizance of the varying levels of ability of each individual. This move was
reflected in one of the objectives in the reform policy of the government, namely "enabling students to develop inquiring and creative minds" (Ministry of Education, 1995, p.3).

To this end the Ministry of Education (1995) noted that this policy aimed to combat some disturbing features which have emerged from the education system. These include "children displaying a lack of creativity and innovation" as well as "a lack of self-esteem, motivation and general belonging to family, community and nation" (p. 18). In addition, the paper further stated that some pupils were completing secondary school without any form of proper certification since "they would have attained a level of knowledge and skills which were insufficient for them to gain acceptable passes on regional examinations" (p. 18). The paper highlighted the need for reforming teaching methods used at all levels of the education system.

An overview of the various levels in the education system in Barbados

Formal schooling is compulsory in Barbados for children between 5 to 16 years of age and free to those attending government institutions from the primary to university levels. The education system is multi-staged with some overlapping at each stage. This section provides an overview and description of the expectations of each level of the education system.

Pre-primary education at the time of writing was not compulsory, but the Education Act (1991) noted and made provision for the presence of this age group in the education system. Pre-primary or nursery education as it is locally called, caters for children between the ages of 3-5 (referred to as under-fives in this study). These children are admitted to schools during the school
year (1 September to 31 August) when they celebrate their third birthday. They change officially from pre-primary to primary during the school year when they celebrate their fifth birthday (Ministry of Education, 1995). The Ministry of Education (1995) reports that the syllabus followed by under-fives was similar to the early childhood education (ECE) programme offered to the 5-7 age group. This programme “seeks to help them build good habits for effective living, enjoy living and learning through play, learn spiritual and moral values and develop thinking skills and imagination and acquire self reliance” (Ministry of Education, 1995, p. 18).

Primary level caters to children between the ages of 5-11 who are taught in primary schools. Pupils between ages 5-7 pursue an early childhood education programme similar to that offered to under-fives and those between the ages of 8-11 follow the regular primary school curriculum. This age group, which include the 8-9, 9-10, and 10-11, are taught separately in subjects such as Mathematics, Science, Health and Language Arts. The White Paper on Education Reform (Ministry of Education, 1995) reports that the government supports the position that primary education forms the “bedrock of our education system” (p.20), providing quality education for the children leaving these schools. The Ministry of Education (1995), in the White Paper on Education Reform outlined the aims for every child leaving primary school. These include being able to “Read, write and speak English, count and calculate, reason and solve problems while thinking critically and creatively, develop skills in conflict resolutions, develop a high level of self esteem” (p. 45).
Secondary level caters to children between the ages of 11-16. They are taught at 22 government secondary schools and 12 assisted private secondary schools throughout the island. Entry to government and private secondary schools is based on the results from the Barbados Secondary Schools Common Entrance Examination (BSSCEE) taken from 9 to 11+ years. Additionally, the private secondary schools enrol children whose parents can afford to pay the school fees. The programme offered at private and government schools is wide and varied and culminates with examinations offered by the Caribbean Examination Council (CXC). Based on the results of the CXC some students aged 16 to 19 then gain places at one of the 4 secondary schools and 1 college, which offer advanced level programmes. The advanced level qualifications achieved at this stage allow for entrance into tertiary level education.

The major function of secondary schools as reported by the Ministry of Education (1995) is of ensuring that all students acquire knowledge, skills and attitudes which will lay the basic foundation for future jobs and careers. In addition, the secondary level was described as building on the primary foundation in reading, writing and problem solving skills while deepening the levels of understanding across a variety of subject areas. This level also enables students to “access, analyze, interpret and use information, develop relationship to school, community and country, become aware of career and job paths and the prerequisite skills for their choice, and foster positive attitudes and values” (p. 45).

Tertiary level caters for students and adults pursuing post secondary programmes in a wide variety of areas. These vary from vocational to
academic subjects, which are offered at public institutions. These include the University of the West Indies, which offers undergraduate and graduate studies in several disciplines; a polytechnic whose objectives are to develop trade skills and skilled craftsmen; a community college which provides education and training at the technician, middle-management, vocational and professional levels; and a teachers’ training college which provides professional training for teachers and administrators in the area of education.

This study focuses on the pre-primary stage of education that offers schooling to under-fives or children in the 3-5 age group. The next section explores the early childhood education programme offered to under-fives in Barbados.

**Early childhood education (ECE) in Barbados**

Evans (1993) in a review of early childhood care and development in developing countries, concluded that there was increased governmental commitment to early childhood programming, especially as the international community had come to value the importance of early childhood provision. The Government of Barbados seemed committed to ECE, given the descriptions of the aims and objections for this age group, as outlined in the White Paper on Educational Reform (Ministry of Education, 1995).

The Paper described Early Childhood Education as laying “an early foundation in literacy, numeracy, oracy and appropriate socialization into a democratic society in preparation for the world of work” (Ministry of Education, 1995, p. 60). Given this crucial role, the Government noted its
policy to provide nursery school education for all children between the ages of 3 and 5.

From as early as the 1960s, the Government of Barbados instituted a policy to provide nursery education for children between the ages of 3 and 5. Four government nursery schools were opened between 1965 and 1995. These nursery schools, located in St. Michael, catered specifically for under-fives in communities within the city and urban districts. These schools were described as well equipped to meet the need of under-fives in the provision of education (Ministry of Education, 1995).

Despite the availability of these four government nursery schools and the enrolment of under-fives in private institutions which offer both early childhood education programmes and care, primary schools were inundated with requests to admit this younger age group (Ministry of Education, 1995). The requests were from parents in the rural parishes and St. Michael who were unable to enrol under-fives in the four government nursery schools. The reasoning common to these requests was that the education in the primary school was free, and unlike the nursery schools, the children remained there for the complete school day (Ministry of Education, 1995, p. 59).

The Ministry of Education (1995) reported that because of the increased public demand for more education for under-fives in government institutions, public primary schools were encouraged to admit 3 to 5-year olds. Riviera (1986) gave two possible reasons underpinning the decision to admit under-fives to primary schools. Firstly, she noted that they were admitted to fulfil the needs of parents for supervision of their preschoolers. Secondly, to
provide an opportunity for children who could not be accommodated in
nursery schools to be exposed to suitable learning experiences which lead to
the acquisition of pre-requisite skills necessary for the primary school.

Schools with the necessary resources were encouraged to make
provision for these younger children in their reception classes. Consequently,
in the 1986-87 school year, primary schools with accommodation admitted
under-fives to their classrooms (Ministry of Education, 1995). At the time of
this study under-fives were being taught in three types of schools, these
included nursery classrooms in primary schools (5-11 age group), government
nursery schools (3-5 age group) and infant schools (5-7 age group). There
were 4 nursery schools and 42 primary, including infant schools on the island,
with nursery classrooms. Two distinct age groups exist within the 3-5 age
group. These included children between the ages of 3-4 and 4-5 years olds. In
most schools where there were large numbers of under-fives, the 3-4 age
group were taught together and called nursery classes. Those in the 4-5-age
range were grouped and called reception classes. Variations existed in rural
primary schools where enrolment of under-fives tended to be low. In some
instances the two age groups were combined and taught as a mixed group of 3-
5 year olds, while at other schools the two groups were taught separately, but
in the same classroom.

The Ministry of Education (1995) noted the limited resources in place
for under-fives in primary classrooms. In acknowledging under-fives as
‘different’ from their older counterparts, the Ministry suggested that resources
available in the primary schools were insufficient to support this new initiative
satisfactorily. The nursery classes in primary schools were noted to be suffering from “lack of materials, inadequate staff and basic facilities for pupils between the ages of 3-4” (Ministry of Education, 1995, p. 19).

The Ministry of Education (1995) noted the need to have all under-fives in school settings by the year 2000, regardless of the contexts of the schools. There has been a steady increase in the number of under-fives in government schools since 1986. In 1986-87 there were 8,115 under-fives between 3 and 5 years in Barbados. Of these, 4,339 were enrolled in early childhood government nursery, infant and primary institutions, and another 1,075 in private institutions. The Ministry of Education noted a short fall of 2,701 under-fives who did not have access to early education in formal educational school settings. Table 1 shows the number of under-fives enrolled in government nursery, infant and primary institutions for four-year periods from 1986 to 1997.

Table 1
Pattern of enrolment of under-fives in government school in four-year intervals.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of under-fives in Government Schools</td>
<td>4339</td>
<td>4545</td>
<td>4559</td>
<td>5205</td>
</tr>
</tbody>
</table>

The Ministry of Education (1995) emphasized a commitment to strengthening the role of ECE in an effort to raise the overall standard and quality of student learning reflected in its theme “quality education for all”
The Ministry noted ECE was vital to the early cognitive, linguistic, social and emotional development of the child, and especially so "for children from socially deprived and non-stimulating educational background" (p. 8).

In an effort to provide quality education to meet the needs of under-fives, training for teachers in ECE began in the early 1980s (Ministry of Education, 1995). Initially ten teachers benefited from training from overseas institutions (Riviera, 1986) and then in 1987 provisions were made to have teachers trained locally in ECE at the teachers' college. The first group of teachers trained, completed a two-year full time course but this course was then reduced to a one-year, one-day-a-week release course. This meant that teachers participating attended classes one day a week and taught in their individual classrooms on a full time basis for the other four days of the week. Teachers also benefited from short training courses and workshops conducted by professionals in ECE, for example a visiting professor from North America. These local and overseas, short and long term, early childhood courses exposed teachers to knowledge about pedagogic practices embedded in "child centred" approaches to ECE, aimed at developing critical thinking and problem solving in young children.

One area of study to which teachers were exposed and which contributed to the focus of this study was the notion of developmentally appropriate practice based on Piaget's theory of child development, and advocated by the National Association for the Education of Young Children (NAEYC, 1987). This association provided guidelines for practices described as appropriate and inappropriate for use in ECE in terms of age and
development of young children. For example, practices advocated for under-fives came from a child centred perspective where teachers were encouraged to develop independence, cooperation and decision making among students through projects, free choice activities and integrated methods of teaching. These practices were described as a means of providing students with the opportunity to explore, discover and link the various subject areas. NAEYC (1987) also emphasized the active participation of children in their own learning, therefore reflecting critical thinking and problem solving. The guidelines designed specifically for the 3-4 and 4-5 age groups, were one of the sources from which the ideas for a range of pedagogic practices, later construed by the teachers in this study, were derived.

As a part of its strategic action plan for reforming the education system, the Ministry of Education encouraged the stakeholders in education to express their views and participate in the further development of education. This was reflected in its theme “Each one matters: Quality education for all” (Ministry of Education, 1995, p. 1). Arguing the government’s commitment to a policy of “participatory democracy” in the reforming of education, the Ministry of Education (1995, p 32) stressed the need for the continuation of a “broad based consultation, review and sector analysis with principals and teachers”. This commenced in 1995.

In explaining the need to consult with teachers in the process of reform, the Ministry of Education noted the need for “revaluing the role of teachers” (Ministry of Education, 1995, p. 3). This Ministry expressed the view that future education must, of necessity, concentrate on the crucial role of
teachers as providers of knowledge in the system, since they were the “leading change agents in the classroom and in the schools” (Ministry of Education, 1995, p.38). The Ministry acknowledged that teachers could contribute to the reform process based on their years of training and experimenting with strategies that encourage critical thinking and problem solving. This process, it is argued, would have resulted in the accumulation of personal practical knowledge about pedagogic practices advocated for use in the education of young children.

This study aims to elicit, construct and interpret the personal practical knowledge held by teachers and therefore make a contribution to the reform process. Consulting with teachers about knowledge gained within the contexts of their individual classrooms provides valuable feedback about various practices used in the shift from learning by rote to developing critical thinking and problem solving in young children.

The Problem and Significance of the Study

Barbadian teachers’ personal practical knowledge about pedagogic practices advocated for use in education of under-fives has not been previously explored. The significance of this research is obvious when it is noted that past research in teachers’ thinking, focused on schools settings in developed countries (Charlesworth, 1990; Elbaz, 1983; Munby, 1983; Olson, 1981; Rusher, McGreven, & Lambiotte, 1992). As Lockheed and Verspoor (1991) noted, schooling in developing countries takes place under conditions that are very different and significantly more difficult than in developed countries. They explained:
Primary students in industrialized countries are likely to attend classes in modern, well-equipped buildings and to study a curriculum whose scope and sequence are well designed. On average they receive 900 hours of learning time and $52 of non-capital material input each year and have a teacher with sixteen years of formal education. Moreover, they share a teacher with fewer than twenty other children, most of who are healthy and well fed (p. 39).

By comparison:

In many low-income countries... students are likely to attend a shelterless school or one that is poorly constructed and equipped. Their curriculum is likely to be poorly designed. On average they receive over 500 hours of learning time and $1.70 of non-capital material input each year and have a teacher with only ten years of formal education. The learning environment typically has few resources, and classes consist of more than fifty children, many of whom are chronically undernourished, parasite ridden, and hungry (p.39).

Lockheed and Verspoor (1991) identified two reasons underpinning the difficulties developing countries have in improving education. These include inadequate knowledge about the effectiveness and cost of education at the local level, and difficulty in obtaining appropriate information about local problems. They argued that there is a need for adequate and appropriate information based on research at the local level, for continual improvement of the educational system in developing countries.

Given the Ministry of Education’s provision of professional training courses for teachers in ECE, and its acknowledgement of teachers as important stakeholders central to the reform process, this research will contribute to the continual development of education in Barbados. In addition, the Ministry of Education has noted the crucial role teachers play, as agents of change in the classroom, while recognising individual instructional and management style. This was reflected in one of the aims of teacher education as noted in the
White Paper on Educational Reform (Ministry of Education, 1995), that of “developing a reflective and individualised approach to teacher preparation which will take into account each teacher’s individual instructional and management style” (p. 40).

In this study, teachers’ knowledge is especially important, since it focuses on information derived from the local level. This knowledge provides an understanding of the variables constraining or enabling the implementation of pedagogic practices used in various classroom settings. This knowledge also has the potential to provide a foundation on which to build a knowledge base that can contribute to the enhancement of coherent teaching strategies for ECE in Barbados.

This research also helps in stimulating the teachers involved in more reflective self-analysis, and a deeper understanding of their classroom practices. Researchers have argued that teachers’ knowledge, which consists mainly of implicit or tacit knowledge, is rarely articulated and teachers may not be aware of inconsistency and paradox in their thinking (Arthur, Beecher, Dockett, Farmer and Richards 1993) and of any contradictions and discrepancies in their knowledge (Corrie, 1995). As a consequence, the findings from this study have the potential to help teachers clarify their knowledge as they review advocated pedagogic practices.

Other teachers and parents hold views or often wonder about what should or should not be done in classrooms and their perspectives may conflict with those of the classroom teachers (Feiman-Nemser & Floden, 1986). The
findings are therefore significant to teachers and parents in informing and explaining pedagogic practices used by teachers of these young children.

Given the present government's commitment to ECE and its desire to have teachers contribute to the development of education, this study is timely in terms of the contribution it can make to further developments in education, envisaged for the country. This study is therefore significant to the Ministry of Education in terms of its potential to provide appropriate and adequate information at the local level. The findings will therefore be of significance to the government's continual strategic planning of ECE especially since they are rooted in the experiences of the teachers in their individual contexts.

Additionally, this study will be significant to educators in the field of early childhood in that it analyses and interprets knowledge held by teachers from a developing country. This knowledge provides opportunities for making recommendations that are grounded within the social and cultural structures of a developing society, its schools, and teachers' understanding and first hand experiences of how practices work in their environments. Other developing countries, which share similar circumstances, may benefit from the findings. This study therefore has the potential to make a significant contribution to the body of knowledge on teachers' thinking.

Aims of the study

This study investigated 21 Barbadian teachers' personal practical knowledge about 17 pedagogic practices advocated for use in the education of under-fives. It explored, formulated and interpreted the way teachers constructed their knowledge within the various contexts in which they taught.
Specifically, the study sought to:

- elicit, interpret, and create an understanding of the way the teachers constructed their personal practical knowledge regarding 17 pedagogic practices;
- understand the teachers' construing of the meanings of the advocated practices;
- elicit and probe the elicited constructs and their associations with, and implications for the practices;
- identify and gain insights into the underlying factors composing the teachers' knowledge of the practices and how these were influenced by individual contexts;
- extend an understanding of previous exploratory, descriptive research regarding the importance and contributions of teachers' thinking to the study of teaching, from the perspective of a developing country;
- provide practical information and recommendations that can be useful in the strategic development of policy and practice in ECE in Barbados.

The research questions

The study therefore investigated the follow central question:

- How do Barbadian teachers construe their personal practical knowledge about 17 pedagogic practices advocated for use in the education of under-fives?

In particular the study focused on the following sub questions:

1. How do the teachers construe the meanings of the advocated practices used in the education of under-fives?

This question is explored using a repertory grid technique and answering these questions:
2. What are the teachers' elicited constructs and what do they imply about the advocated practices used in the education of under-fives in their teaching contexts?

3. What are the associations and implications between the grouped constructs and practices or elements?

Deeper probing through the use of in-depth interviews answered the following question:

4. What underlying factors compose their personal practical knowledge about the advocated practices and how do these influence their use in their individual classrooms?

Operational definitions

These definitions provide an understanding of terminology used in the study. Further depth in meaning of these terms is given in the text.

Under-fives - children who are 3 years or older, but younger than 5 years and are a part of the early childhood programmes in school settings.

Early Childhood Education (ECE) - defined as the education provided for children from birth to seven years (The Ministry of Education, 1995, p. 18) but focussing on the three to five year olds in this study.

Personal Practical knowledge - "composed of theoretical knowledge elements, elements of understanding of the practical curriculum situation, and of personal beliefs and values concerning what can and should be done in given circumstances" (Connelly and Dienes, 1982, pp. 183-4).
**Pre-school Education or Nursery Education** - all the formal education that a child experiences from three to the time he/she begins formal schooling which is at age five in Barbados (Ministry of Education, 1995, p. 19).

**Pedagogic Practices** - refer to the instructional and classroom management strategies and approaches used in teaching (Lockheed and Verspoor, 1991, p. 63).

**BSSCEE** - Barbados Secondary School Common Entrance Examination taken in the school year (1 September to 31 August) when the child turned 11. From 1996 the age for taking the examination changed from 11 years to the year in which the child is ready to take the examination, on a range from age nine to age thirteen (The Ministry of Education, 1995).

**Developing countries:** refers to countries characterized by relatively low-income per-capita, limited or no industrialization and restricted infrastructure. The World Bank delineates three types of developing countries - 49 low income economies with a GNP per capita ranging between $80 to $730; 40 lower middle income economies with a GNP per capita ranging between $770 and $3,020 and; 17 upper middle economies with a GNP ranging between $3,160 and $8,210 (World Development Report, 1997).

**Thesis outline**

Chapter Two provides an overview of the literature as it relates to teachers' thinking in general, and personal practical knowledge in particular. The chapter concludes with the importance, and a synopsis of, research in teachers' knowledge.
The theoretical and conceptual framework in which the study is framed is explained in Chapter Three. The interpretive paradigm as it relates to the study is addressed, as well as an overview of Personal Construct Psychology. The philosophical assumptions underpinning Personal Construct Psychology is then explained, followed by the conceptual framework of the study. The chapter concludes with a presentation of a conceptual framework derived from the dimensions under study.

The methodology in Chapter Four explains the methods of investigation used in the study. It details the phases of the study, the instruments used, the data collection process, data analysis and the issues related to validity and reliability of the study and the repertory grid. The final part of the chapter focuses on ethical considerations.

Chapter Five highlights demographic and background factors as they relate to the context and teachers participating in the study. It presents information about the types of schools, class sizes, and age range of under-fives in each school, the number of classes and the location of the schools. Background information about the teachers includes the age range of the teachers, their training and qualifications, and teaching experiences.

Chapters Six through to Ten present the findings of the study and answers the subsidiary research questions posed at the start of the study. Chapter Six answers question two and question three of the sub questions. It focuses on the repertory grids, and the analysis of the elicited constructs in regard to the elements or practices construed in the study. Two examples of
the analysis of the repertory grids are explained. The identification of emerging themes is also presented.

Chapter Seven answers research questions one, two and three. It presents two examples of the analysis of the principal component maps and the teachers' construing of the meanings of the pedagogic practices. The chapter ends with a summary of these findings from all teachers.

Chapter Eight answers the fourth research question. It presents the teachers' constructions of the factors composing their personal practical knowledge about the advocated pedagogic practices or elements, analysed under themes that emerged from the teachers' elicited constructs. The chapter ends with a summary of the findings presented in the chapter.

Chapter Nine collates and discusses the findings from the previous chapters, summarises the answers to the subsidiary research questions, and answers the main research questions posed at the beginning of the study. The chapter concludes with a summary of the findings presented in the chapter.

Chapter Ten presents the implications and recommendations derived from the teachers' construing of the practices. It also highlights the limitations of the study and offers suggestions for further research in the area of teachers' thinking. The chapter concludes by providing final comments about the significance of the findings to educational reform in Barbados.
CHAPTER TWO

Literature Review

Introduction

There is recognition in the field of education that the early years of schooling are crucial, and that young people need a solid foundation on which to build their lives and education (Cumming, 1991). Cumming (1991) further noted that controversy has always existed over what children should be taught and how they should be taught. Added to this controversy are the varied and complex factors, influencing national early childhood policies. These factors include individual historical traditions, widely differing cultural attitudes and a variety of political and economic realities (Pascal & Bertram, 1992), as well as sociological research, philosophical views and religious beliefs (McCarthy, 1990).

With the advancement of knowledge of child development in the 20th century, many theories evolved and influenced practices in ECE (Spodek, 1993). New theories of child development were promulgated from two contrasting views, sometimes described around the nature-nurture controversy. Put in its simplest form, naturists felt that heredity determined development, while nurturists viewed the environment as the factor controlling the development of the child and therefore learning (Spodek & Saracho, 1990). These notions influenced the way in which early childhood educators conceived early childhood programmes (Spodek, 1993).

Historically, the British education system and policy influenced education in Barbados but in recent years, trends and development from North
America have increasingly dominated Barbadian cultural and educational patterns and habits (The Barbados-US connection, 1996). For example, teachers trained locally were exposed to American ECE programmes. These programmes were often based on the philosophies of theorists such as Sigmund Freud (1856-1939) and his personality development, Jean Piaget (1896-1980) and his intellectual development, and Erik Erikson (1902-) and his psychosocial development (Spodek, Saracho and Davis, 1991). This training resulted in policy promoting creative expression through play, drama, art and music, self-directed activities, exploration, discovery, questioning, and critical thinking. The pedagogic practices investigated in this study were initially and in part derived from an examination of various programmes advocated for use in ECE in the literature. The next section examines these various pedagogic practices and the implications for use in ECE.

Pedagogic practices in ECE

Various pedagogic programmes have been advocated in terms of the experiences to which young children should be exposed in early childhood classrooms. Kohlberg and Mayers (1972) noted three perspectives that form the knowledge base in ECE. They described the maturationist view as reflected in an environment where the individual child is allowed to develop naturally and spontaneously. The cultural transmission view was described as that in which skills, knowledge, and values of the dominant culture is transmitted. The cognitive-developmentalist view was described as a prescribed set of experiences intended to facilitate the progression of the child through developmental stages.
Debates concerning the use of these three perspectives have occurred over the past several decades resulting in a variety of curricula being offered in ECE (Katz & Chard, 1989; Seefeldt, 1987; Spodek, 1993). Advocates of the maturational views of ECE stressed the child's natural interests, learning patterns and motivation. A maturationist curriculum is child-centred, with a focus on the child rather than on the transmission of any particular set of skills or forms of literacy (Jipson, 1991).

A more academic focus within early childhood education occurred during the 1960s. Based on principles of learning theory and behavioural psychology, these programmes emphasized the cultural transmission of knowledge and behaviour (Kohlberg & Mayer, 1972). Jipson (1990) noted these three points about academic programmes. First, they promote the acquisition of skills and behaviours needed in facilitating the transition of pupils into public schools. Second, they provide experiences that assist the child in successfully meeting the social norms and expectations of public schools. Third, they accelerate the development of readiness skills and academic learning. Academic readiness, achieved through direct teaching is a central goal of these programmes (Fowell & Lawton, 1992; Spodek, 1993).

During the last decade, the cognitive-developmental perspective (Kohlberg & Mayers, 1972) has dominated ECE. Programmes reflecting this view were founded on scientific research in university laboratory – pre-schools, rooted in developmental psychology and reflected mostly the theories of Piaget. Kohlberg & Mayers (1972) described this perspective as that in which the children acquired knowledge through experiential problem solving, resulting in
active changes in patterns of thinking. Children were seen as constructors of knowledge through their interactions with each other and the environment, and through resolving cognitive conflicts and problems on an individual basis and at their own pace. From this perspective emerged the concept of "developmentally appropriate practice" (Bredekemp, 1987) to which teachers in Barbados have been exposed in their local training, and which has been accepted as part of ECE in parts of North America (Charlesworth, 1990; Mangion, 1992) and Australia (Fleer, 1992). The next section examines the concept of developmentally appropriate practice from which the majority of the pedagogic practices investigated in this study were derived.

**Developmentally appropriate practice in ECE**

During the late 1980s the National Association for the Education of Young Children (NAEYC) and (Bredekemp, 1987) noted the trend on re-emphasis on basic skills in ECE and a move toward a more academic focus, in light of public demand for accountability in the classrooms. In response to increasing pressure to begin formal, academic skills training in ECE, the NAEYC issued a position statement entitled, *Developmentally Appropriate Practice in Early Childhood Education Programmes Serving Children Birth Through Age Eight* (Bredekamp, 1987), which renewed interest in a cognitive-developmental model as the basic for ECE. The concept of developmental appropriateness advocated in this statement was based on age and individual development of the child.

Developmentally appropriate practices encompass an integrated curriculum in which learning occurred, primarily through play, projects, learning
centres, informal, integrated, free choice, and child initiated approach, as opposed to formal, narrowly defined subject areas, and teacher directed teaching (Bredekamp, 1987). The position statement advocated organized activity choices and opportunities to explore content areas within a time structure and on one-to-one and small group basic. Teachers were expected to organize structured environments and facilitate children’s engagement. Learning activities and materials were expected to be concrete, real, and relevant to the lives of young children.

However, education theorists raised many concerns about developmentally appropriate practice. For example Kessler (1991) and Spodek (1993) questioned the validity of development as the only justification for appropriate practices. Spodek (1993) argued that the cultural context must also be considered with the knowledge and developmental dimensions. Kessler (1990) saw knowledge and developmental dimensions as reflections of cultural perspectives and therefore artifacts of the contextual dimension. Fleer (1995) wondered if teachers should allow the child to proceed at his or her own pace, as advocated, or if the teacher should dictate the pace in a much closer personal relationship with the child.

Fenstermacher (1994) argued that the complexity of everyday classroom practices must be revealed through uncovering teachers’ personal practical knowledge and relating this to their practices. In addition, Fenstermacher (1994) suggested that teachers’ knowledge and understanding of early learning can contribute to the development of learning theory, and is
therefore worthy of exploration. The following section examines the literature relevant to personal practical knowledge.

**Defining personal practical knowledge**

Pajares (1992) noted that personal practical knowledge as a term is often disguised under many aliases. Terms such as beliefs, practical knowledge, pre-theoretical knowledge, subjectively reasonable beliefs, to name a few, were identified in the literature. Some researchers in attempting to define personal practical knowledge have given specific definitions. For example Sigel (1985, p.351) defined personal practical knowledge as beliefs or “mental constructions of experience - often condensed and integrated into schemata or concepts that are held to be true and guide behaviour”. Brown and Cooney (1982) used the term beliefs and described these as dispositions to action and major determinants of behaviour, with dispositions being time and context specific.

Personal practical knowledge was described by Feiman-Nemser & Floden (1986) as “those beliefs, insights, and habits that enable teachers to do their work in schools” (p. 512). These writers argued that given this perspective, research shows that teachers’ knowledge has the characteristics that philosophers have always attributed to personal practical knowledge, that it is “time bound and situation specific, personally compelling and oriented toward action” (Feiman-Nemser & Floden, 1986, p. 512).

Harvey (1986) defined the term as an individual's representation of reality that has enough validity, truth, or credibility to guide thought and behaviour. Abelson (1979) saw personal practical knowledge, which he called beliefs, in terms of people manipulating knowledge for a particular purpose or
circumstance. This psychological context in which teachers plan and decide was described as a mixture of partially articulated theories, beliefs and values as well as the dynamics of teaching (Clark & Paterson, 1986).

**Components of personal practical knowledge**

Fenstermacher (1994) described personal practical knowledge as being both implicit and explicit in nature. Explicit knowledge was described as being in the teachers' conscious awareness and the knowledge teachers think and talk about freely. Implicit knowledge, referred to as tacit knowledge is believed to have a major influence on practice. Corrie (1995) explained that tacit knowledge was not in the conscious awareness, it influenced practice in important ways but teachers find it hard to talk about it and it remained implicit. Olson (1992) contended that tacit knowledge is gained through experience and it directs practice at an intuitive or taken for granted level.

Some writers in describing personal practical knowledge identified and made a distinction between two components, namely knowledge and beliefs (Pajares, 1992; Stevens, 1976; Nisbett and Ross 1980; Ernest, 1989). The influence knowledge is perceived as having over belief, especially as it relates to how people organize and define tasks, was also noted by some writers (Nespor 1987; Roehler, Duffy, Herrmann, Conley & Johnson, 1988). They agreed that the cognitive components represented knowledge and the belief component represented the affective outcomes. Stevens, (1976) described personal practical knowledge as psychological constructs involving the individual's orientation to the external world. He saw personal practical knowledge as largely cognitive (concerning knowledge or what the individual
assumes to be knowledge) rather than affective (related to emotions) or
cognitive (about will or behavioural intentions). Rokeach (1968) too
described beliefs as having a cognitive component representing knowledge, an
affective component capable of arousing emotion, and a behavioural
component activated when action is required.

In summarizing the debate about beliefs and knowledge, (Pajares,
1992) argued that even though some researchers saw the two terms as
synonymous, the origin of all knowledge is rooted in beliefs, since ways of
knowing are basically ways of choosing values. He further argued that
cognitive knowledge, however envisioned, must also have its own affective
and evaluating component and concluded that the distinction between the two
terms is artificial since:

All human perception is influenced by the totality of generic knowledge
structure schemata, constructs, information, beliefs, but the structure
itself is an unreliable guide to the nature of reality because beliefs
influence how individuals characterize phenomena, make sense of the
world, and estimate covariation (Pajares, 1992, p. 310).

Kelly (1955) agreed and made no distinction between cognitive or
affective constructs. Pajares felt that beliefs influence cognitive knowledge
and attitudes and values formed an individual's belief system. Berger and
Luckmann (1991) argued that within a society, knowledge or cognition was
normally viewed as a complex theoretical system, which serve as a
legitimization for institutional order. They argued that this theoretical
knowledge was only a small and by no means the most important part of what
passed for knowledge in a society. They felt that primary knowledge about
the institutional order is knowledge on the pre-theoretical level. They
described personal practical knowledge, the sum total of what everybody
knows about a social world, as "an assemblage of maxims, morals, proverbial
nuggets of wisdom, values and beliefs, myths and so forth, the theoretical
integration which requires considerable intellectual fortitude in itself" (p.83).
They summarized practical knowledge as pre-theoretical knowledge
composed of beliefs and theories that teachers develop about teaching, and
noted that these were legitimate sources of professional behaviour. They
argued that practical knowledge was as important to education practice as
were the theories of developmental psychology.

This does not mean however that theoretical knowledge is not useful to
the practice of early childhood education. Spodek (1988) argued that such
theories provide both the basis and the rationale for professional actions. He
felt that it was plausible that teachers transformed this knowledge as they work
with children and the transformation occurred as theoretical knowledge was
integrated with other elements to make a set of theories or beliefs that drive
professional teaching acts. Spodek (1988) viewed personal practical
knowledge as knowledge developed by practitioners out of their experience
and that of others, and tested in their practices (Spodek, 1988).

The debate concerning any distinction between the belief component
and the knowledge component of personal practical knowledge is unresolved
and ongoing. This study uses the definition posited by Connelly and Dienes
(1982) who focused their research on teachers and their knowledge. They
defined personal practical knowledge of teachers as composed of "theoretical
knowledge elements, elements of understanding of the curriculum situation,
and of personal beliefs and values concerning what can and should be done in
given circumstances” (pp. 183-4). They described theoretical knowledge
element as the theories to which teachers were exposed in their training,
curriculum element as the guidelines given for use with the under-fives, and
personal beliefs and values as aspects of the individual personalities and traits.

**Uncovering personal practical knowledge**

Lockheed and Verspoor, (1991) described teaching as a complex
process and stated that teachers must command a wide range of pedagogic
practices for teaching specific subjects and managing the classroom. Over the
years in the field of the study of teaching, justification for pedagogic practices
was based on the process-product design focusing mainly on the relationships
between teacher performance and the success at learning tasks by students
assigned to complete these tasks (Fenstermacher, 1979, 1994). Some
researchers felt that this type of research was somewhat limited in scope and
suggested that the decisions construed by teachers about practices for a
particular age group were strongly influenced by their beliefs and practical
knowledge about teaching and learning.

McLean (1991) argued and some researchers agreed that internal
aspects such as personal practical knowledge alone cannot account for teacher
actions. Some researchers have noted the reciprocal relationship that may or
may not exist between personal practical knowledge and actions. Nespor
(1987) Zeichner, Tabachnick & Densmore (1987) argued that the daily
functioning in the classroom and the decision making concerning instruction
and classroom management may reflect the personal practical knowledge held by the teacher in that classroom.

Clandinin (1986, p. 177) posited the view that it was futile to attempt to understand this practical knowledge by trying to analyze teachers' actions in terms of various theoretical approaches. Charlesworth (1990) also found difficulty uncovering teachers' personal practical knowledge through linking theories to teachers' classroom practices. Charlesworth (1990) further warned that unless teachers were educated to teach within a strong theoretical framework attached to specific classroom practices, it is very unlikely that what teachers' think will be congruent with their practice. Cullen (1994) too found discrepancies between theory and practice. She argued that teachers claimed that they were concerned with all aspects of the child's development, not just the intellectual or academic. However, in her observations of early childhood classrooms she found that the teachers were driven more by a perceived need to cover curriculum content than by the developmental needs of the child. Thus, what teachers say and what they actually do did not necessarily match.

Silin (1985) posited the view that justification for practice must be found in practical knowledge. Spodek (1988) too stressed that to understand teacher's personal practical knowledge, one must understand the thought processes regarding teaching and the conceptions that drive these processes. Spodek (1988) described the relationship between practice and personal knowledge and noted that there was more to teaching than observable actions. Teachers' decisions and classroom actions were noted to be often driven by
their perceptions, understandings and beliefs that were not easily modified by
the results of research or by new educational or development theories.
Spodek (1988) further argued that teachers created conceptions of their
professional world based upon their concept of that reality. These conceptions
provided a way to interpret their perceptions in terms of their beliefs about
what was true. These interpretations, in turn, become the basis for their
decisions and actions in the classroom. As a result, he and others argued that
there were few commonalities to be found in the way teachers teach even
within the same school and with the same training and knowledge (Munby,
1983; Pajares, 1992).

Teachers can therefore beviewed as important agents of change or
major obstacles to reform efforts (Prawat, 1992) as they may resent and resist
efforts to change them (Elbaz, 1983; Fenstermacher, 1979). The personal
practical knowledge held by teachers is therefore seen as an important source
of information.

**Difficulties of accessing teachers’ personal practical knowledge**

Feiman-Nemser & Floden (1986) argued that teachers have not always
been seen as possessing a unique body of professional knowledge and
expertise. They noted that the prevailing view among most researchers was
that teachers have experience while academics have knowledge. As a result
some researchers have moved from describing and analyzing professional
knowledge or technical knowledge to the study of teachers’ personal practical
knowledge. Some researchers still contend that the question of why and on
what grounds these beliefs, insights, and habits should be considered knowledge, must also be answered.

In the development of the process of "getting inside teachers' heads" to describe their personal practical knowledge some researchers identified some difficulties. Arthur, Beecher, Dockett, Farmer & Richards (1993) argued that early childhood practitioners might not be aware of inconsistency and paradox in their knowledge as they articulated their knowledge rarely. Contradictions and discrepancy in their knowledge occur when teachers do not talk about what they know (Corrie, 1995). Fragmentation occurs since practitioners do not form explicit or cohesive theories that can be reformed or restructured (Prawat, 1992). Clandinin & Connelly (1987) contended that teachers might appear to accept reform or new policy because they do not link the reform to their tacit knowledge. This means that they are less likely to raise questions about issues or critically analyze the reform in view of the contextual conditions that influence their work.

Feiman-Nemser & Floden (1986) argued that teachers often found it difficult to describe practical knowledge. They noted that some researchers felt that this was because often people did things and could not state what they knew since this type of knowledge was often tacit. They felt that the kinds of knowledge that philosophical and psychological researchers talk of, fitted theoretical knowledge and not tacit knowledge and included theories, propositions, and concepts. Lortie (1975) argued that teachers lacked a technical culture, a set of commonly held empirically derived practices and principles of pedagogy but instead develop practices consistent with their
personality and experience. Others argued that teachers justified their teaching on the basis of feelings and impulse rather than reflection and thought (Jackson, 1968).

Feiman-Nemser & Floden (1986) suggested three reasons why teacher’s personal practical knowledge was not readily accepted by researchers as legitimate sources of knowledge. They felt that some researchers limited problems of practice to technical choices that required the testing of relationships between ends and means. They noted that decisions made in the classroom should not be considered capricious just because they require instantaneous responses in a complex and fluid environment. They argued that teachers’ personal practical knowledge has been questioned because scientific knowledge is valued higher than personal practical knowledge, especially since the former offered more objective and reliable picture of classroom life. They further argued that teachers’ personal practical knowledge has been criticized because their descriptions of teaching were more like stories than theories especially since they are full of the particulars of their own experiences, details of specific classrooms and the views of individual teachers.

Some researchers did not see this description of teachers’ personal practical knowledge as less valuable, just different from scientific knowledge. Buchmann (1983) argued that the goal of wise action and the practical contexts of teaching provide the appropriate terms for describing what teachers know how they acquire this knowledge and how they use the knowledge. As a consequence he saw the purpose of personal practical
knowledge not as an advancement of general understanding but as informing wise action.

There is however agreement that teachers represent a source of knowledge about teaching and that they generate legitimate theories and beliefs in relation to the practice of teaching (Spodek & Saracho 1990). The problems encountered when teachers’ thinking was ignored were noted in previous research which showed that teachers’ thinking have important bearings on the teaching process within their classroom settings (Olson, 1981; Munby, 1983; Elbaz, 1983). For example these researchers noted the conflict between the implementation of a curriculum and the personal practical knowledge held by the teachers. Others argued that the knowledge bases from which teachers teach were closely related to consistency and prediction in their classroom actions (Beaty, 1984; Ott, Zeichner & Price, 1990, Spodek, 1988). McLean (1991) argued that although a knowledge base was aimed at through teacher education, often teachers were presented with a set of rules that they were expected to internalize and develop as appropriate practice in their classrooms. She further argued that when a mismatch occurred between the rules and the teachers’ perceptions of their own action, then personal anxiety resulted and the teachers changed the rules to fit their circumstances. These findings indicate that the study of teachers’ personal practical knowledge has implications for the understanding and development of education.

This discussion implies that teachers have a substantial body of knowledge but as Feiman-Nemser & Floden (1986) contended, only when
consideration is given to how the knowledge is used will an understanding of
the sense in which it is practical, be gained. The next section discusses the
importance of research about teachers' personal practical knowledge and this
is followed by an overview of some empirical research in the area.

Importance of research about teachers' personal practical knowledge

Fenstermacher (1979) noted that an examination of subjective beliefs
of teachers and the evidence bearing upon them can be the initiating focus for
the development of a knowledge base for teaching and establishing the
foundation for teachers' professional classroom behaviour. Such an
examination is also believed to be the foundation for teachers to be able to
enhance their own education, the education they provide for their students and
the education system in which they work (Rusher, McGrevin & Lambiotte,

The personal practical knowledge that teachers hold is also believed to
be of great value in the continual development of education (Rusher,
argued that lasting improvements in public education must come from within
the schools themselves, informed by the exploration of teachers’ personal
practical knowledge. Rusher, McGrevin & Lambiotte (1992) also contended
that as early childhood programmes become a part of the public school
system, teachers needed to be empowered and involved in curricular decisions
and development at the site level, and these could be achieved through
reflection on their personal practical knowledge. Prawat (1992) too noted this
regard for teachers as important participants in policy development, which
Consideration is given to how the knowledge is used will an understanding of the sense in which it is practical, be gained. The next section discusses the importance of research about teachers' personal practical knowledge and this is followed by an overview of some empirical research in the area.

**Importance of research about teachers' personal practical knowledge**

Fenstermacher (1979) noted that an examination of subjective beliefs of teachers and the evidence bearing upon them can be the initiating focus for the development of a knowledge base for teaching and establishing the foundation for teachers' professional classroom behaviour. Such an examination is also believed to be the foundation for teachers to be able to enhance their own education, the education they provide for their students and the education system in which they work (Rusher, McGrevin & Lambiotte, 1992; Fenstermacher, 1979).

The personal practical knowledge that teachers hold is also believed to be of great value in the continual development of education (Rusher, McGrevin & Lambiotte, 1992; Ministry of Education, 1995). Barth (1990) argued that lasting improvements in public education must come from within the schools themselves, informed by the exploration of teachers' personal practical knowledge. Rusher, McGrevin & Lambiotte (1992) also contended that as early childhood programmes become a part of the public school system, teachers needed to be empowered and involved in curricular decisions and development at the site level, and these could be achieved through reflection on their personal practical knowledge. Prawat (1992) too noted this regard for teachers as important participants in policy development, which
involved references to their personal practical knowledge. Porter, Archibold & Tyree, (1990) maintained that a shift from top-down to bottom-up control to teacher empowerment was needed, whereby teachers could share their personal practical knowledge. Teachers were also encouraged to become major players in the formation of a knowledge base for early childhood education so that they can contribute in areas such as the development and implementation of curricula through description, reflection and evaluation of their personal practical knowledge (Ott, Zeichner and Price, 1990).

Research regarding teachers' personal practical knowledge in the study of teaching was explored and findings reported (Elbaz, 1983, Munby, 1984, Olson, 1981). These researchers and others (Clark and Peterson, 1986; Pajares, 1992) called for more investigations in the area of knowledge that teachers hold about teaching. The importance of this knowledge was reflected in findings, which reported that teaching was influenced by the adjustments and changes teachers made in order to adapt their practices to the needs of students and the social context in which they work (Fenstermacher, 1979, 1994; Spodek, 1988).

Munby (1983, p.11) too argued that "just as one cannot teach without holding beliefs and principles neither can one understand teaching without knowledge of what these might be". Researchers began to emphasize the importance of encouraging teachers to articulate their personal practical knowledge and to describe how this knowledge affects the way they interpret what they do in their classrooms. Some believed this emphasis was especially needed since attitudes and values held by teachers of young children appeared
to be related to teacher effectiveness (Feeney and Chun, 1985; Fenstermacher, 1979; Spodek, 1987). Fenstermacher (1979, p.160) noted also that "knowing what accounts for effective teaching constitutes knowledge of how to produce more effective teachers”.

Research on teachers’ personal practical knowledge

Much of the research done on teachers’ personal practical knowledge focused on the congruence between teachers’ beliefs about explicit or technical theories taught in education and child development courses, and classroom practice. For example, Charlesworth (1990) in the study of 113 kindergarten teachers’ beliefs on a developmental approach and classroom practice found that there was consistency between what teachers believed and their instructional activities. They also reported positive correlation between developmentally appropriate beliefs and activities. They concluded that the personal practical knowledge of the teachers provided the bases for interpreting experience, helped determine the decisions and actions of the practitioners, and were often described with non-theoretical personal value terminology. In a study done by Hatch and Freeman (1988), they reported discrepancies between what teachers reported their personal practical knowledge or beliefs to be and their classroom practices.

Clark and Paterson (1986) in their review of the research done on teachers’ thinking noted that research that focused directly on teachers' personal practical knowledge constitutes the smallest and youngest part of the literature of research in the field. They reported too that previous studies of teachers' personal practical knowledge focused on how teacher's cognition and
behaviour were guided by and made sense in relation to a personally held system of beliefs, values, and principles (Clark & Paterson, 1986). They summarized studies focusing directly on teachers' personal practical knowledge. Munby's (1983) research on the implicit beliefs of fourteen teachers of a junior high school, using a repertory grid technique concluded that the number of constructs needed to describe a teacher's implicit theory ranged from three to five. The most common constructs being student learning and development goals, student involvement, teacher control and authority, student needs and limitations and motivation.

Rusher, McGrevin & Lambiotte (1992) reported on the belief system of early childhood teachers' and their principals regarding early childhood education. The principals and teachers completed a sixty-four-item questionnaire, which revealed that their beliefs about the nature of children were manifested in their practice and main areas of agreement were on activities, curriculum content and child-centredness. Duffy (1977) used the repertory grid technique and observation of eight teachers of beginning reading. He reported that four of the eight teachers behaved in ways consistent with their espoused belief systems about teaching and reading. The remaining four teachers departed, to various degrees, from their espoused beliefs.

Olson (1981) too made similar findings when he explored the implicit beliefs of eight teachers of science in secondary schools using the repertory grid technique and interviews. He discovered that teachers organized their theories of good teaching around the influence and control that they had in
their classrooms, and when exposed to a new curriculum they transformed and adapted it to fit their implicit theories of teaching.

Elbaz's (1983) study of a high school English teacher's practical knowledge is significant because it argues the importance of teacher's beliefs, as it examined the implicit view of a teacher's knowledge within top-down development. It also provides a conceptual model of a teacher's practical knowledge. Within a case study framework, Elbaz (1983) conceptualized teacher's knowledge as consisting of four broad categories: content, orientation, structure and cognitive style. The findings identified five areas of the teacher's practical knowledge, which included curriculum, subject matter, instruction, and milieu of teaching and self. Three structural forms of practical knowledge were also identified and these include rules of practice, principles and images. She concluded from this study that it was possible for teachers to become aware of and articulate their own practical knowledge, and that this process can lead to greater self-understanding and professional growth. This study yields a complex picture of the nature of practical knowledge and Elbaz concluded that the reality is complex, since teachers' beliefs and principles are varied, rich and unique. Lampert's (1981) work focused on a personal knowledge, which included the teachers' personal knowledge of self and that of the students. Lampert saw personal knowledge as including knowledge of "who the teacher is and what she cares about" (p.204) as well as knowledge of students beyond that provided by pencil and paper test. He argued that because they worked together over time in a common endeavor, teachers come to know their students as people and to hold out some expectations for their
human development. He drew the conclusion that the personal practical knowledge that the teacher possessed was essential in accomplishing what the teachers care about, what students want and what the curriculum required.

In a study of 51 early childhood teachers' self-reported beliefs and behaviour, Kagan and Smith (1988) revealed that teachers who were idealistic in cognitive style, and who tended to rely on feelings and intuitions rather than analytic thought processes to evaluate the situation, were associated with a child-centred ideology rather than a teacher structured approach. Spodek and Rucinski (1984) studied the educational beliefs of early childhood teachers, relating their classroom work to the theories in use that underlie classroom decisions. They reported that few teachers' beliefs were shared by all, even among teachers working with children of the same age. Rather, individual teachers had diverse sets of implicit theories. They noted that the focus for the early childhood teachers' beliefs were related to keeping the class going and fell into categories of classroom management, instructional processes, planning and organization. In a more recent study, Lin and Spodek (1994) used a case study approach to examine two early childhood teachers' teaching images or practical knowledge and how these relate to their classroom practices. Classroom observations, videotaping, interviews, written plans, personal journals and reflections were the major source of data collection. Findings indicated that these teachers held specific teaching images before they started training, these images were deeply rooted in their own experiences, and were ways of representing knowledge that could readily be translated into action.
Summary

In each study, though the approaches, methods and foci varied, the teachers were given the opportunity to describe their personal practical knowledge in their own words and make their implicit theories become explicit. It can be concluded that teachers do hold implicit theories about their work and these can be made more explicit through a variety of direct and indirect inquiry techniques.

Conclusion

The study of teachers' personal practical knowledge is important in discovering what they think about a range of pedagogic practices and how these relate to the under-fives in their own classroom settings. This review of literature has shown that teachers hold implicit or tacit knowledge about teaching derived from interactions with the situation in which they teach, the society in which they live, their personal beliefs and experiences, and from the knowledge to which they were exposed in their teaching careers. This study makes teachers' personal practical knowledge explicit as it formulates insiders’ views of a range of pedagogic practices used in the education of under-fives in early childhood education in Barbados.

The next chapter details the theoretical framework used in the study.
CHAPTER THREE
Theoretical Framework

Introduction

This chapter describes the theoretical and philosophical assumptions that underpin the study. The first section describes the interpretative paradigm in which the study is located and the second section details Personal Construct Psychology (Kelly, 1955) and its associated methodology repertory grid technique, a main data collection method used in the study.

The Interpretative Paradigm

This qualitative study is based in an interpretative paradigm and framed according to Personal Construct Psychology (Kelly, 1955). The guiding principle within the interpretative paradigm is that of understanding the way in which individuals create, modify and interpret the world in which they find themselves (Burrell and Morgan, 1979). This principle is also described as an abiding concern for the life world, for the emic point of view, for understanding meaning, for grasping the actor's definition of a situation, for verstehen (Schwandt, 1994). In an overall view of this approach, Burrell and Morgan (1979) explained the interpretative paradigm as being informed by a concern to understand the world as it is, to understand the fundamental nature of the social world at the level of subjective experience.

The interpretative paradigm therefore seeks explanations within the realm of individual consciousness and subjectivity that are within the frame of reference of the participants. The emphasis is placed upon the explanation and understanding of what is unique and particular to the individual. Burrell and
Morgan (1979) noted that the interpretative paradigm tends to be nominalist, anti-positivist, voluntarist and ideographic.

First, nominalism is concerned with the way respondents structure their reality rather than the make up of the social world. Within this study this means that the focus is on the way the fundamental meanings of the teachers’ personal practical knowledge are structured. The commitment from this perspective is implicit rather than explicit and is oriented towards obtaining an understanding of the subjectively created social world of the classrooms for under-fives ‘as it is’ in terms of the teachers’ views of an ongoing process. It involves issues relating to the nature of the reality of the situation in which the teachers work, the factors that suggest consensus and cohesion, as well as conflicting ideas that emerge as the teachers make explicit their implicit or tacit personal practical knowledge.

Second, anti-positivism holds that the social world is essentially relativistic and can only be understood from the point of view of the individuals who are directly involved in it. In this study, personal practical knowledge regarding a range of pedagogic practices used in the education of under-fives is understood from the perspective of teachers who are directly involved in teaching. Understanding is therefore gained from the inside rather than the outside, and is essentially a subjective rather than an objective enterprise. This is also in congruence with Personal Construct Psychology (Kelly, 1955).

Third, voluntarism holds the view that individuals are autonomous and free-willed. This position is opposed to determinism, which regards
individuals and their activities as being completely determined by the environment in which they are located. In explaining the relationship between the individual and the environment, some theorists incline to one or other of these points of view or adopt an intermediate standpoint, allowing for the influence of both perspectives. Within this study, the voluntarism view is held, with the teachers being seen as interpreting the situations in which they find themselves and making meaning of these in the construction of their personal practical knowledge about a range of pedagogic practices used in the education of under-fives.

Fourth, the ideographic stance is based on the view that the social world is understood by obtaining first hand knowledge of the subject under investigation rather than basing the research upon systematic protocol and technique. The emphasis is on the relativistic nature of the social world and it stresses the importance of the subjective experience of individuals in the creation of the world. The world is seen as an emergent social process, which is created by the individuals concerned. Social reality, insofar as it is recognised to have any existence outside the consciousness of the individual, is regarded as a network of assumptions and inter-subjectively shared meanings. In this study this means that the views of individual teachers are regarded as the primary source of information as reflected in their individual experiences with under-fives and pedagogic practices. The interpretative paradigm used in this study provides a foundation for understanding the teachers’ constructions of their personal practical knowledge about a range of pedagogic practices used in the education of under-fives. Personal Construct
Psychology (Kelly, 1955) and its methodology fits well in this paradigm, and is explained in the following section.

**Personal construct psychology (PCP)**

Personal Construct Psychology and its methodology, repertory grid technique, originally developed by Kelly (1955) and further developed by other researchers (Fransella & Bannister, 1977), were recommended by Pope and Keen (1981) for use in the study of education. Researchers also recommended PCP for use in the study of teachers’ thinking (Munby, 1982; Olson, 1981). In recent years, this theory and various forms of repertory grid technique have been used in research in Science Education (Fetherstonhaugh, 1993), Mathematics (Lehrer & Franke, 1992), Language (Duffy, 1977) and teacher education (Munby, 1984; Olson, 1981). Personal construct psychology is also appropriate for this study because it is concerned with individuals striving to make sense out of the universe, themselves, and out of the particular situations they encounter. Kelly (1955), aiming to understand the meaning of or grasping the actor’s definition of a situation described this as a central goal of PCP.

Repertory grid technique, when used in research, was concerned with the subjective views of the individuals. This grid technique is therefore relevant to this study given the personal and subjective nature of personal practical knowledge and the emphasis on the individual’s interpretation of meaning. Personal Construct Psychology (Kelly, 1955) maintains that behind each act of judgement that a person makes lies his or her implicit theory about the realm of events within which he or she is making judgements (Fransella &
Bannister, 1977). This view is similar to those of researchers such as Berger and Luckmann (1991) and Fenstermacher (1994). Since personal practical knowledge is an indicator of the meanings underlying any decision individuals make throughout their lives (Nisbett & Ross, 1980; Rokeach, 1968), PCP allows the inquirer to elucidate the process of meaning construction. It also clarifies what and how meanings help the person anticipate and control his or her perceptions of events (Fransella & Bannister, 1977). Within this study PCP (Kelly, 1955) and a repertory grid technique are used as a means of exploring and interpreting the personal practical knowledge held by the individual teachers.

Theoretical and philosophical assumptions

Kelly's (1955) Personal Construct Psychology has been described as a well articulated and explicitly stated theory on which research can be based (Fetherstonhaugh, 1993). It emphasises the individual's interpretation of meaning in making sense out of the particular situation being encountered (Kelly, 1955). Kelly's epistemological position is summed up in the assumption that underlies the theory. This position states that "whatever the nature may be, or however the quest for truth will turn out in the end, the events we face today are subject to as great a variety of constructions as our wits will enable us to contrive" (Kelly, 1970, p. 1). Kelly (1955) did not see one construction being better than another did, or cognitive as different from affective. He did not deny that "at some infinite point in time human vision will behold reality out to the utmost reaches of existence" (p. 1), but he maintained that all our present perceptions are open to question and
reconsideration. This philosophical position he called constructive alternativism, which sees our constructions subjected to alternative constructions.

The theory sees individuals coming to grips with their world by placing their own interpretations upon what they perceive, that is, their construing of it. Fransella & Bannister (1977) in their analysis of implicit theories, explained that each person has many implicit theoretical beliefs as well as smaller theories or construct systems which are linked into the overall theory called a personal construct system. These theories, whether formal or informal, idiosyncratic or commonly held, are the networks of meaning through which persons see and handle the universe of situations through which they move (Fransella & Bannister, 1977). This view is similar to that of Berger and Luckmann (1991) and Fenstermacher (1994).

Kelly (1955) therefore did not deny the existence of reality, but maintained that "the open question for man is not whether reality exists or not but what he can make of it" (p. 25). He argued that knowledge, even highly developed scientific knowledge, could be subjected to human reconstruction. Kelly further maintained that a person obtained his or her view of this universe "through transparent patterns or templates which he creates and then attempts to fit over the realities of which the world is composed" (Kelly, 1955, pp. 8-9). Kelly’s constructive alternativism stressed the importance of events, but maintained that the individual determines the meaning to be ascribed to it. The meaning ascribed to an event is anchored in its antecedents and its consequence (Kelly, 1970). Kelly’s (1955) principle on ontology was
summed up in his views of the individual and society. He saw each individual as a scientist, inventing and re-inventing an implicit theoretical framework that, be it well or badly designed, is the individual's personal construct system. He did not see a person's behaviour as driven by instincts or by schedules of reinforcement. He viewed the individual as engaging in a process of observation, interpretation, prediction and control of their external environment through the anticipation of events. He saw events as confirming or refuting predictions and encouraging construction. Kelly (1955) therefore saw individuals as being like scientists, making hypotheses, testing them out, and if necessary revising them on the basis of the evidence that they collect. Individuals were therefore seen as continually conducting experiments on their own behaviour in order to test hypotheses that were formulated when they rearranged constructs within their own systems. These hypotheses were then revised in light of the outcomes of their behaviour and different experiments conducted to test new constructions that may emerge.

Personal Construct Psychology (Kelly, 1955) was founded on a fundamental postulate and eleven corollaries. The Fundamental Postulate states that "A person's processes are psychologically channelized by the ways in which he anticipates events" (Kelly, 1955, p. 47). Central to the process of construing is eleven corollaries that provide a coherent theoretical and methodological framework for the examination of teachers' beliefs in this study.

Construction Corollary: A person anticipates events by construing their replications.
**Individuality Corollary:** Persons differ from each other in their construction of events. **Organisation Corollary:** Each person characteristically evolves, for his convenience in anticipating events, a construction system embracing ordinal relations between constructs.

**Dichotomy corollary:** A person’s construction system is composed of a finite number of dichotomous constructs.

**Choice Corollary:** A person chooses for himself that alternative in a dichotomised construct through which he anticipates the greater possibility for extension and definition of his system.

**Range Corollary:** A construct is convenient for the anticipation of a finite range of events only.

**Experience Corollary:** A person’s construction system varies as he successively construes the replications of events.

**Modulation Corollary:** The variation in a person’s construction system is limited by the permeability of the constructs within whose range of convenience the variants lie.

**Fragmentation Corollary:** A person may successively employ a variety of construction subsystems, which are inferentially incompatible with each other.

**Commonality Corollary:** To the extent that one person employs a construction of experience which is similar to that employed by another, his psychological processes are similar to those of the other person.

**Sociality Corollary:** To the extent that one person construes the construction processes of another he may play a role in a social process involving the other person.
The postulate and eleven corollaries are a means of explaining and interpreting the elicited constructs. In this study many of the corollaries may be applied to the interpretation and explanation of teachers’ personal practical practices about under-fives and pedagogic practices. Kelly (1955, p. 200) noted that “the sharing of personal experience is a matter of construing the other person’s experience and not merely a matter of having him hand it to us intact across the desk”. Personal Construct Psychology therefore lends itself well to the handling of the theoretical problem of gaining access to private worlds and the interpretation or reification of them. Kelly (1955) developed an interview format that was both flexible and revealing of the structure of an individual’s interpretative system - the repertory grid, which is a way of exploring the structure and content of such implicit theories. Within this study, Personal Construct Psychology and a repertory grid technique provided a coherent theoretical and methodological framework for elicitation and exploration of teachers’ personal practical knowledge about under-fives and a range of pedagogic practices. The repertory grids completed by the 31 teachers in the study are discussed in Chapter six.

**Conceptual framework of the study**

The conceptual framework is derived from the background to the study; the literature review and PCP previously discussed. This framework provides a means of describing the subjective processes through which individuals may undergo in making meanings of their situations.

To understand teachers’ personal practical knowledge about under-fives and pedagogic practices, it is essential to examine the dialectic between
individuals and their anticipation of events in early childhood education in Barbados. From this perspective Kelly (1970) contended that the individual is seen as one who is confronted with a situation in which he or she has to act. He described the individual as construing external factors in the environment or contexts as he or she proceeds to build his or her own experiential cycles upon their construction of what is being considered. This comprises previous research which showed that teachers' in their construing of pedagogic practices, anticipated external factors such as the cultural and social environment in which they taught (Jipson, 1991) as well as their own personal images of teaching (Elbaz, 1983).

In attempting to accommodate constructs to events in anticipation of future experiences, Kelly (1970) explained that individuals experienced an emerging of new behaviours and thoughts. He emphasised the internal psychological functioning, focussing on the processes by which events were represented and anticipated. Events can be regarded as meaningful in terms of the individual's anticipation of them. The testing of constructs against reality in search of a better prediction can result in the confirmation or refuting of anticipation. If the predictions and control of events were successful then constructs become meaningful and may lead to the development of new constructs and beliefs.

The qualitative nature of the study, the interpretative paradigm and PCP (Kelly, 1955) in which the study is based, require that attention be paid to the context in which the teachers work and live. As Roberts (1982) stated, "we have no knowledge of an event... until we know the context in which it
occurs” (p.279). The school settings in which the teachers do their thinking will be described from the perspectives of the teachers in terms of the class size, school location and age range of under-fives. Personal information about the 21 teachers, namely their ages, qualifications, teaching experiences and training will also be described.

The task of capturing the meanings that permeate the teachers as individuals within their school cultures and society, will result in the researcher being able to uncover the teachers’ constructions of their personal practical knowledge about advocated pedagogic practices used in the education of under-fives. Personal practical knowledge as understood and formulated by the teachers will be based on or rooted in the contexts in which they work at that given time. As a result the constraints and opportunities the teachers construed in their constructions of their personal practical knowledge will be noted. The findings provide the basis for building and understanding teachers’ personal practical knowledge, and analysing the implications and recommendations contributing to the reforming of education in Barbados.

Summary

This chapter presented the theoretical framework of the study. It explained the interpretative paradigm in which the study is based. It detailed the theory used in the study, Personal Construct Psychology and its methodology, repertory grid technique, originally developed by Kelly (1955). The chapter closed with a description of the conceptual framework of the study. The next chapter presents the methodology used in the study.
CHAPTER FOUR
Methodology

Introduction

This chapter explains the methods used for data collection. The first section explains the methods of investigation. The next section details the first phase of the study. This preparatory phase describes the selection of the sample, and the instruments used in the study. It details the features of a repertory grid technique, including constructs, nature of elements, the elicitation of constructs, and the rating and analysis of a grid. These are followed by an explanation of the advantages of the repertory grid technique, identification of elements used in the study, the pre-testing of the elicitation of constructs, the survey of background and demographic information, an overview of depth interviews, and the preparation for the depth interview.

The main phase explains the data collection process. It details the pre-testing of the repertory grid technique and depth interview in Barbados. This section also describes the data collection process in Barbados, implementation of the full form grid technique, the elicitation of the teachers' constructs, completion of the survey, conduct of depth interview and data analysis. Issues of credibility, reliability, validity and ethical consideration are also addressed in this section. The chapter concludes with a review of the areas covered, followed by a brief introduction to the next chapter.

Methods of investigation

Qualitative research methodology has been described as relevant, appropriate and promising in a study of teachers' thinking and their personal
practical knowledge or beliefs (Schunk, 1991; Munby, 1984). This research is
grounded in an interpretive paradigm and framed according to Personal
Construct Theory (Kelly, 1955). The data collection methods used, included a
Repertory Grid Technique originally designed by Kelly, (1955), as well as
depth interviews. Methods used incorporate two major procedures, exploration
and inspection (Sarantakos, 1993) in order to elicit the content and structure of
the teachers' knowledge.

The repertory grid technique (Kelly, 1955) allowed for an exploration
of constructs and elements, called pedagogic practices in this study. The grids
allowed the researcher to probe for, and seek a clear understanding of elicited
constructs and how these are associated with the elements or practices.

Inspection involved deeper analysis of the elicited constructs through
the use of an intensive and concentrated method of inquiry, namely depth
interviews. The data collected during the repertory grid interviews is further
probed, questioned and analyzed during depth interviews in order to elicit
further underlying knowledge about the elements or practices.

These methods were embedded in communication between the
researcher and the respondents, especially since the teachers were the ones to
define, explain, interpret and construct reality as they saw it (Sarantakos, 1993).
The combination of methods served to explain and triangulate the data and
therefore strengthened the study design (Denzin, 1978, Patton, 1990). Table 2
gives a summary of the research questions as they relate to the methods used in
the study.
Table 2

A summary of the research questions and the methods used for each question.

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Method Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do Barbadian teachers’ construe their personal practical knowledge about pedagogic practices advocated for use in the education of under-fives in their individual contexts?</td>
<td>Repertory grids, survey about background information, depth interviews</td>
</tr>
<tr>
<td>How do the teachers construe the meanings of the advocated practices used in the education of under-fives?</td>
<td>Repertory grids, survey about background information</td>
</tr>
<tr>
<td>What are the elicited constructs and what do they imply about the advocated practices used with under-fives in their teaching contexts?</td>
<td>Repertory grids, survey about background information</td>
</tr>
<tr>
<td>What are the associations and implications between the grouped constructs and practices or elements?</td>
<td>Repertory grids, survey about background information</td>
</tr>
<tr>
<td>What underlying factors composed their personal practical knowledge about the advocated practices and how do these influence their use in their individual classroom?</td>
<td>Depth interviews, survey of background information</td>
</tr>
</tbody>
</table>

Phases of the study

The Preparatory Phase of the Study

Before commencing the study, permission needed to conduct the research in the government schools was obtained from the Ministry of Education of Barbados. The specified date for entry to the schools was scheduled for the first and second terms of the 1995 to 1996 school year, and the Ministry requested a copy of the findings. Correspondence between the researcher and the Ministry of Education in Barbados can be seen in Appendix A. The Ministry also sent letters of approval to all the primary and nursery...
schools in Barbados asking them to give full cooperation during the period of visits by the researcher.

Selecting the sample

Previous research into teachers' personal practical knowledge (Ebaz, 1991, Munby, 1983, Olson, 1992) only focused on a few teachers in one or two settings. Given the unique context of the Barbadian society, which is located on a small developing island where it is difficult to ensure that subjects remain anonymous, a larger sample of teachers was used. In addition, selecting the sample from various contexts in the island provided the opportunity to sample a wider cross section of teachers' knowledge.

Munby (1983) noted that the act of teaching was a human one, and beliefs and principles of teachers represent a profound part of the context in which the act is engaged. To ensure the sample included teachers from various contexts, reputational case selection (Mcmillan & Schumacher, 1989) in which a knowledgeable person made recommendations to the researcher, was used. In this study an informant from the Ministry of Education made recommendations based on the provisions made for under-fives in school settings. The informant had the experience of visiting schools on a regular basis, and provided a list of ninety (90) schools including nursery, infant and primary schools. Forty-two (42) schools with early childhood classes, that is, children older than three but younger that five, were identified from across the island. The informant then identified nineteen (19) primary schools from the forty-two (42) schools, with at least one, and in some cases two from each of the eleven parishes (Figure 1). In addition, based on the fact that they catered
only to under-fives, four government nursery schools were recommended for inclusion in the study. These four nursery schools were located in the urban or city district, which in this study, is the Parish of St. Michael. This brought the total of schools recommended to twenty-three.

These distinctions for site selection, namely schools with under-fives and at least one from each of the eleven (11) parishes were essential since the forty-two schools with under-fives were not spread evenly across the 11 parishes. At least two parishes in the rural districts had only one and two schools each with provisions for under-fives. This meant that if these schools did not participate in the study, another school in that or any other parish could not replace them. So that when two teachers withdrew from the study (one because she was ill and another who opted to withdraw in the initial stages of the grid technique) they were not replaced. Their schools were the only one in one instance, and one of the two chosen in the second, catering to under-fives in those parishes.

Despite six of the twenty-one schools with under-fives being located in St Michael, there was at least one school from each of the ten rural parishes left in the study. This however was not a truly representative sample, but as Guba and Lincoln (1981) note, representativeness is not crucial in interpretive studies since the reader does not use probabilistic inferences to draw conclusions.
Instruments used in the study

The researcher as an instrument

Patton (1990) explained that the researcher is an instrument in qualitative research and determines to a large extent, the trustworthiness of the data. Experience in the methods to be used was therefore considered to be crucial in the data collection process. For this study the researcher gained experience in the development and implementation of the repertory grid technique and depth interviewing through rigorous pre-testing and training before the data collection process as explained in later sections of this chapter. Experience in the technique of interviewing was also gained from previous research.

Patton (1990) also explained that the relationship established between the participants and the researcher is important for rapport, trust and reciprocal relations. As a citizen of Barbados who lives, was educated in, and teaches in the education system, the researcher was able to empathize with and established a good rapport with the teachers. Given this background and experience, and having worked in similar early childhood settings, the researcher was able to act as a facilitator in the data collection process.

As one of the instruments in the study, the researcher took to the field her prejudices and assumptions about pedagogic practices use in the education of under-fives. Since any views voiced could have some bearing on the teachers’ thinking, all efforts were made to ensure the researcher did not make any evaluative comments or express personal views in the interest of eliciting the teachers’ knowledge. The researcher acknowledged the teachers as
primary sources of knowledge, especially since they were the ones who worked with and knew under-fives and the contexts in which they taught, while testing and re-testing their constructs of various pedagogic practices. This study therefore sought to allow teachers to express their own knowledge about a range of pedagogic practices used with under-fives in their own teaching contexts.

**An introduction to the repertory grid technique**

Repertory grid technique (Kelly, 1955) is a methodology which provided insight into each teacher's unique construction of her personal practical knowledge. As part of Personal Construct Psychology (PCP) this technique is very appropriate for this study. It is an adaptable technique that may be used in many different ways (Fransella and Bannister, 1977) the major limit on its range of application being the ingenuity of the researcher (Winter, 1990). Winter (1990) further maintained that despite the fact that the interpretation of grid scores is a subjective affair, the grid provides a rare combination of an idiographic approach, coupled with objectivity in scoring. This idiographic emphasis, Winter (1990) argued, distinguishes it from a questionnaire while it offers greater objectivity than most projective techniques. Basically the repertory grid consists of a grid or matrix of cells in which are entered the rating made by an individual on his or her constructs and elements. These two concepts, namely constructs and elements are now explained.
 Constructs

Kelly (1955) devised the repertory grid in order to sample the constructs held by a person about external events. In Personal Construct Psychology (PCP), constructs “can be regarded as a way of seeing some things as alike, yet different from others with these differences and likenesses being considered simultaneously” (Fetherstonhaugh, 1993, p. 33). Constructs are essentially bipolar in nature and consist of a personally relevant pole describing the similarity between events and a contrasting pole implying the opposite of the similarity, for example *I like/I dislike*. As Kelly (1955) noted, constructs allow for the discrimination and organization of events and allow the anticipation of future events. Constructs also have a range of applicability called the range of convenience and this, along with the contrast pole, differ from person to person even when they used ostensibly the same constructs.

Kelly described different kinds of constructs. Constructs can be superordinate or subordinate to another construct. Constructs that are superordinate are likely to be more stable and more resistant to change than the lower order constructs. Core constructs are those, which he defined as involved in the day to day processes of maintaining identity and a sense of continuing existence. Changing these constructs was described as difficult because of the links to identity. Kelly (1955) noted that when core constructs were changed, it represented a fundamental disturbance to the system. Peripheral, subordinate constructs can be changed more easily as reformulation of a system was much less complicated when these constructs were changed.
Fransella & Bannister (1977) noted also that individuals have important constructs in their system but these constructs may have no word labels, that is, they are non-verbal or pre-verbal. In addition, constructs are tentative explorations and the distinction between constructs may be blurred and confusing. Constructs can also be closely interrelated to other constructs and are described as tight while loose constructs lead to more varying predictions. Kelly (1955) noted that loose and tight constructs do not imply good and bad but since constructs were tested in day to day experiences they are successively tightened and loosened. He concluded that a loose system does not allow accurate predictions and a tight system can be rendered ineffective in terms of predictions as events proceed.

**Nature of the elements used in the study**

Kelly (1955) used the term "elements" to represent people who fulfilled specific roles in the subject's life, for example *mother, father, brother, and sister*. In Personal Construct Psychology (PCP), elements are also used for situations, or a domain or range of experience of interest to the investigator. Elements are usually chosen to represent and define the domain of discussion. Elements are described as "items in the test that are used for comparison purposes, in order to elicit the constructs that the person uses to distinguish between the elements* (Fetherstonhaugh, 1993, p. 39). For example, based on his research in Science, Fetherstonhaugh (1993) used elements such as *potential energy, kinetic energy, solar energy* and *nuclear energy* to represent the concept energy. In this study the pedagogic practices
are represented by elements such as Child Centred, Child Initiated, Free Choice, Formal, Teacher Directed and Separate Subjects (Appendix B).

Elicitation of constructs

Kelly (1955) originally asked the subject to supply a different person to fit specific roles in the subject’s life, for example a teacher you like, wife, husband, father, mother, or person you would like as a companion on a trip. The name of each person was written on separate cards and became the elements. Three of the cards were picked out at random and the subject was asked to suggest some important way in which two of them are alike but different from the third. The response became one pole of the construct and the subject was then asked how the third person was different from the other two. The response formed the other pole of the construct. The examiner noted the elements to which the construct applied using ticks and crosses. In the original form of the grid the person just ticked the names of people who processed the characteristic of the emergent pole. The elicitation process was then repeated using different triads of cards.

Fransella and Bannister (1977) described other techniques for the elicitation of constructs and noted that in the interview situation there is no formal procedure for grid completion. The technique chosen for this study is that in which constructs are elicited on a one-to-one basis in a conversational manner. In this technique the teachers are presented with the triad form of the repertory grid and asked the standard question “In what way are two of these elements groups the same yet different from a third?” This method allows the interviewer to enter the constructs as they are elicited, into a grid sheet (see
Appendix B). After all the constructs have been elicited, the sheet can be handed to the interviewee for rating of the element on the constructs, on a scale of 1-5. The ratings result in the formation of a matrix of numbers (Appendix E). Grids have been used successfully in many areas, for example in the area of teachers' personal practical knowledge or beliefs (Munby, 1984, Olson, 1981) and science education (Fetherstonhough, 1993).

Some advantages gained from using an interview situation to elicit constructs were identified by Fetherston (1995), these included the confirmation and elaboration possible during elicitation, the verification of construct labels to confirm that they truly reflect what the interviewee intended and that the elicited constructs do apply to the elements. For example, in response to constructs Good/Bad the researcher may ask, "Are you sure igneous rocks can be good or bad? (Fetherston, 1995, p17).

Eliciting the contrasting pole

There were two ways described in the literature to elicit the contrast pole of a construct. One is to ask how the element in the elicitation triad or group is different from the other two, which were stated to be alike. The other is to ask what is the opposite of the stated likeness of the elicited construct. Since the latter method produced more explicit bipolarity-polarity than stating the difference (Fransella and Bannister, 1977), this method was used in this study because of the importance of understanding how constructs interact. Fransella and Bannister (1977) cautioned that people often gave the conventional opposite of the construct rather than the opposite of the construct within the context in which it is being used. Questioning the teachers in terms
of the meaning of the opposing construct to the practice construed was used in this study. For example, “What would you say is the opposite of your construct I like for this group of elements as oppose to another one or two?”

**Rating the grids**

In showing the relationship between the elements and the constructs, two basic types of methods may be used. The subject may be asked to assign each element to one or the other (or neither) pole of each of their constructs. This split-half method requires that half of the elements are allotted to each pole of a particular construct, allowing the exclusion of very lopsided constructs, but imposing a degree of constraint on the subjects which may be considered unacceptable (Bannister and Mair, 1968). Another form and the method tried and used in this study, is to ask the respondents to rate the elements in terms of each construct, that is, the constructs form a rating scale. For example in Figure 2, Fetherston (1995) gave this example of how a grid can be rated. Fetherston (1995, p. 16) explained that the six elements were rated using a student's elicited constructs, and the elicited poles formed a rating scale, which the student used to rate all elements, with the numbers being written in the appropriate place in the grid" (p. 16). In Figure 2, the respondent is asked to rate the six elements, River, Lake, Ocean, Groundwater, Runoff, Rain in relation to each constructs or poles such as Salty/Not Salty, Drinkable/Undrinkable.

The advantages are that this allows the subject the freedom of assigning more than one element to the same point on a construct dimension, and the possibility of not applying a construct to a particular element if the
element is beyond the construct’s range of convenience. When constructs cannot be applied to elements, a zero is commonly used in grids to indicate that a construct cannot be applied to a specific element. In Figure 2 a zero is applied to the element Rain as the constructs Affected by tides/Constant level cannot be meaningfully applied to the element Rain.

<table>
<thead>
<tr>
<th>Product of rain/runoff</th>
<th>Salty</th>
<th>Not salty</th>
<th>Not mobile</th>
<th>On surface</th>
<th>Drinkable</th>
<th>Flow continually</th>
<th>Flow downwards</th>
<th>Affected by tides</th>
<th>Constant level</th>
<th>Hardly flow down</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FIGURE 2:** A student’s constructs regarding water (Fetherston, 1995, p. 16)
Analysis of the grid

A variety of methods of analysis may be applied to the completed matrix of numbers forming a grid. Kelly (1955) suggested that the nature of the constructs and elements elicited might be examined to identify areas of concern for the investigator. These include the permeability of the construct (indicated by the number of times the construct is repeated with different triads), or the ambivalence (reflected by two or more constructs sharing the same contrast pole). Winter, (1990) gave an example of the various construct categorization systems that may be used for the content analysis of the constructs elicited. He noted that to assess how the individuals construe particular elements a simple examination of the constructs contained in the unanalyzed grid could be used. Complex statistical analysis is not always necessary as much information is conveyed just by the constructs. Visual inspection of the grid matrix may be used to reveal interesting features about the elements and the ways in which they are construed.

Kelly (1955), Bannister, (1965) and Bannister & Fransella, (1980) devised hand methods of repertory grid analysis. For example, to assess the relationship between pairs of constructs, the investigator calculates Pearson correlation coefficients between the two sets of ratings concerned. The results are squared and then summed for the Pearson correlation coefficients of particular constructs, providing the variance in the grid accounted for by that construct.

If a more detailed assessment of the respondent’s construing is required, then quantitative methods of analysis are used. Winter (1990) noted
that with statistical programs it was possible when examining the interrelationships between the constructs and/or the elements, to access high levels as well as lower levels of awareness through an examination of the ratings. Many forms of statistical analysis can be obtained from computer packages. Computer programs have assisted hand methods, and these programs can provide an indication of the interrelation between the constructs or elements in the grid. For example, the output obtained from most computer packages when a rating scale is used, include the means rating on each construct, and the variation about the means, which is expressed as a percentage of the total variation about all construct means. The variation about a construct mean is a measure of the extent to which the construct discriminates between elements.

A measure of the individual’s bias towards one or the other poles is then provided, indicating the extent of deviation of construct means from the midpoint of the rating scale. This is usually followed by a matrix of construct inter-correlations, which are assumed to reflect the relationship between the subjects’ constructs. A list of the sum of squares accounted for by each element is presented as percentages of the total sum of squares and these indicate the meaningfulness of each element for the subject.

In this study, a technique derived originally from Eckart and Young (1936) was used to analyze the grids. Their technique is a principal components analysis of each grid, and this preferred form of analysis will now be described in some detail.
Fetherston (1995) described the technique as mapping elements and constructs in the same metric space which, for convenience, is displayed as a two dimensional figure. The two axes of the figure are the first two components of the principal components analysis. The percentage variance explained by each of the two components is important because elements and constructs may appear close on a two-dimensional diagram but in reality be separated by a considerable distance on the third or higher component. Bannister & Fransella, (1980) noted that a principal component analysis required no assumptions about the data being analyzed in terms of the ratings of the elements on the constructs. It is essentially an analysis of the total variance of the data and can be done by row or column, but not the two together. A table of vectors and loadings of each element and construct on each principal component is provided, and by plotting the loading on the first two components a visual representation of the subject’s construct system is obtained. The position of each element is defined by the value of two first components’ loadings concerned, and the constructs are displayed by drawing a straight line through the origin of the graph and the point corresponding to the construct’s loadings on the two components. Fetherston, (1995) noted that the correlation between elements and constructs are directly related to the angular separation of the elements or constructs which comprise and define the space involved. Since correlations can imply a level of precision in the description of each person’s intrapersonal cognitive space for which there is no theoretical basis, less percise words such as "close", "closely associated with"
and "near" are often used to indicate groupings on the principal components map.

Slater (1977) explains that the line drawn is extrapolated to the circumference of a circle with its centre at the origin and a convenient radius extending beyond the positions of the element. The poles of the constructs are then plotted at the points where the lines representing the constructs intersect the circumference of the circle. In the principal components maps these lines and circles are not shown to ensure clarity of labels used. Figure 3 below displays the first two components of a principal components analysis regarding types of teachers. Some groupings with circles are identified but these circles do not appear on the computer output, they are used only for the purpose of identifying groupings of constructs and elements. Constructs are indicated with a dot and elements with a cross. Grouping 1 shows that Self is associated with Dull, Experienced, Demanding teacher, Experienced teacher and close to Organised and Knowledgeable (Fetherston, 1995).
Advantages of the repertory grid technique

The repertory grid technique is useful because it elicits both information that reflects the personal knowledge of the respondents and knowledge that is used on a day to day basis. Winter (1990) noted that respondents might be able to reveal aspects of construing at low levels of cognitive awareness. He argued that this type of construing provides access to
information, which is unlikely to be revealed in an ordinary interview. In addition, he noted that respondents find the grids interesting and thought-provoking since they are able to understand the plots of elements in construct space as seen in principal components analysis, derived from their own responses.

Munby (1983) summarized the suitability of repertory grid technique to the study of teachers' personal practical knowledge or beliefs. He noted that the researcher could control the selection of elements so that the domain in which personal practical knowledge operates is within the scope and interest of the study. Second, there is opportunity in the eliciting of the constructs to employ the teacher's own language and so minimize the contextual difficulties which may result from using the researcher's language. Thirdly, the possibility of using results obtained from the grid as the basis for deriving information about personal practical knowledge will be in the teachers' language. Fourthly, there is a consistency of posture between the theoretical backing to repertory grid technique in personal construct psychology and the orientation of studies, which use personal construct theory (PCP). He argued that when the study takes place in unique contexts, and because the act of teaching is a human one then the beliefs and principles of teachers represent a profound part of the context in which the act is engaged.

Identification of the elements used in the study

There were numerous options available in selecting grid elements. It is within the spirit of Kelly's (1955) theory and his emphasis on the personal nature of the individuals construing, to employ a grid in which the elements
are elicited from, rather than supplied to, the subjects. However providing elements has advantages in some circumstances (Winter, 1990). These advantages include facilitating the making of group comparisons (Bannister, 1960) or ensuring that the subjects tap their construing of some particular area in which the investigator is interested (Winter, 1990). As Yoke (1985) suggested, the elements should be chosen with a clear purpose in mind so those representative elements can be used. This study aimed to investigate the personal practical knowledge of teachers about pedagogic practices used in the education of under-fives in their teaching contexts, and so the elements were chosen with this clear purpose in mind.

As noted in the literature review in Chapter Two, there were some practices advocated as appropriate and inappropriate in a position statement, by the National Association for the Education of Young Children (NAEYC) (1987). This position statement is used as part of a knowledge base, in local early childhood training courses in Barbados. The researcher examined the practices advocated for the 3-4 and 4-5 age groups and applied labels based on the descriptions of what were given as appropriate and inappropriate practices. This means that the labels used as elements are not explicitly used by the NAEYC (1987), but are essentially those of the researcher, but relate to the advocated practices.

For the 3-4 age group the researcher initially identified 14 labels for appropriate practices and 16 labels for inappropriate practices. Some of these included Supporting Environment, Development of Independence as appropriate, and Distant Environment, Entertain Self, as inappropriate
practices. The twenty-three labels initially identified for the 4-5 age group included 23 appropriate, for example Children's Needs & Experiences, Child Centred, Child Initiated, Informal, and 23 inappropriate for example Child's Intellectual Development, Separate Subject, Whole Groups, Abstract. The inclusion of the inappropriate practices were justified by the arguments put forward by some researchers that they were needed in the education of under-fives (Fowell & Lawton, 1992), and factors other than age and development should be considered in pedagogical choices (Jipson, 1991, Spodek, 1993). The researchers' knowledge of the teaching contexts for under-fives and teachers in Barbados, as well as the reactions of a sample of teachers in Barbados, to whom the list of practices were posted, confirmed the need for both appropriate and inappropriate practices. The practices were randomly recorded with no reference made to which were appropriate or inappropriate as noted in the original sources. It should be noted that these are just elements and respondents could construe any as inappropriate or appropriate, as a point of study.

The original list of practices were presented to, and discussed with, colleagues in the department of early childhood education at the Edith Cowan University. They commented on and identified practices unique to each age group, and aided in combining practices common to both age groups. This process resulted in a list of practices that focused on classroom pedagogy included those representing curriculum goals, namely Academic Focus, Separate Subject, Integrated Approach, teaching strategies such as Whole Groups, Small Groups, Individually, Concrete Materials, Abstract Materials,
Teacher Directed, Free Choice, Concrete, Formal, Informal, Structured, Real Life Objects, those that focused on child development, including Child Initiated, Child Centered, as well as those that focused on assessment Observation, Paper/Pencil Test, and discipline, including Positive Guidance, Rule Enforcement.

These pedagogic practices selected from this validation process were also validated by a preliminary sample of six early childhood teachers in pre-primary schools in Australia. The practices were also posted to a teacher in ECE in Barbados who distributed them to other teachers for their comments and suggestions. This process was important in ensuring that the elements were within the range of convenience of the construct sub-system of the teachers. In other words that the elements chosen would be those with which the teachers were familiar. The process also ensured that the elements were representative of the domain of discourse or what was being investigated.

Teachers in Barbados were asked to consider the practices outside the range or scope of their teaching experiences and or training and recommend they inclusion or exclusion among the practices. The teachers accepted the practices as those associated with their training and practice but noted that those that focused on discipline and assessment were limited within the study. After further discussion concerning these two areas, a decision was made not to include them since they were areas that were topics for research in themselves. The remaining seventeen practices became the elements used in the grid technique. These practices include Child Initiated, Teacher Directed, Integrated Approach, Separate Subject, Academic Focus, Child Centred,
Informal, Free Choice, Parent Involvement, Individually, Small Groups, Whole Groups, Abstract Material, Real Life Objects, Concrete, Formal, and Structured. Some of the teachers from Barbados who validated elements later became participants in the study. Ensuring that the elements were selected by and familiar to the teachers in Barbados helped to increase the predictive value and therefore the validity of the grid.

Pre-testing the elicitation of the constructs

The next step after identifying elements in the grid technique is the elicitation of constructs. Since a construct is a verbal label which is an actual discrimination made between elements, Fransella & Bannister (1977) argued that elicited constructs can be used more consistently and in a more structured way by a person than can constructs which have been supplied to them. However, they also maintained that there was no difference in the respondent’s ability to use supplied as contrasted with elicited constructs just as long as the constructs were in the native tongue of the subjects, held the same meanings and were likely to be important to the subject and researcher. They explained that the differences in structural outcomes between supplied and elicited constructs may arise if the verbal labels were unfamiliar to the subjects or peripheral from the point of view of their construct system.

In order to pretest the eliciting of constructs the seventeen elements, for example Teacher Directed, Child Initiated, Free Choice, were recorded on individual cards and taken to three teachers in pre-primary (children 3-4 years) centres in Perth, Western Australia. These teachers were individually presented with the triad form of the repertory grid technique (Kelly, 1955) in
which they were shown three cards and asked in what way the elements on
two were alike but different from the third. As the teachers grouped the cards
in terms of those that were alike, subsequent cards were added and they were
asked the same question. The researcher recorded words or phrases used by
the teachers on the grids and these became the constructs to be used for the
rating of the elements.

The general response from these teachers involved in the pre-testing
process was that they found the triad form of the repertory grid boring and
frustrating. Since the Repertory Grid technique is a flexible procedure and
there is nothing sacrosanct about the triadic method of construct elicitation
(Winter, 1990) the decision was made to try the full context form (Fransella
and Bannister, 1977) with a colleague and four students teachers from ECU.
This form of repertory grid involved recording the elements on separate cards
and spreading these out in front of the respondents. They were asked to think
of and group the elements the way they wanted and consider the similarities
and differences of the elements in one group as oppose to another. The
researcher recorded the words and phrases used to describe the similarities and
differences as the constructs, for example *Needed in early childhood*. The
respondents were then asked for the opposite of the construct (*Not a part of
early childhood*). These teachers were also asked for written responses in
terms of the difficulty and clarification needed in improving the implementing
of this repertory grid technique. They suggested that clearer instructions were
needed in terms of the grouping of cards and noted the difficulty involved in
providing an opposite construct.
Survey of background information

A demographic survey sheet was designed to elicit background information about the teachers and their schools. The data include variables about the teachers such as gender, age, level of training, teaching experiences and qualification and special training in early childhood education. Information about the school included the class, range of under-fives in the class, number of nursery or pre-school classes in the school and the location of the school. A copy of the survey sheet is in Appendix B.

An overview of depth interviews

The depth interviews further elicited the teachers' personal practical knowledge underpinning their construing of the elements. Denzin (1978) identified three forms of interviews. These include firstly the schedule-standardized interview in which the wording and order of all questions are exactly the same for every respondent. Secondly, the non-schedule standardized interview in which certain types of information are desired from all respondents but the particular phrasing of the questions and their order are redefined to fit the characteristics of each respondent. Thirdly the non-standardized interview in which no specified sets of questions are employed, nor are questions asked in a specified order.

After consideration of certain factors noted by Denzin (1978), which include the vocabulary used, the cost factor, the individuals comprising the sample, the meanings of the questions to the sample, and the context, the decision was made to choose the non-schedule-standardized interview. This choice was made because certain types of information was desired from all the
participants, but it was important to take into account the characteristics of each respondent. The particular phrasing of the questions and sequence were adapted to fit the particular teacher being interviewed. A copy of the questions used in the non-schedule-standardized interviews is in Appendix D.

The advantages to be gained from the use of depth interviews for the area under investigation were highlighted by Patton (1990) and included among others the direct interaction between the researcher and the respondent. He noted that nonverbal as well as verbal behaviour can be noted in the face to face interview and that the respondent could be motivated. He noted too that interviews allow for probing, follow up, clarification and elaboration to achieve specific and accurate responses. As Patton (1990 p.290) noted, the “fundamental principal of qualitative interviewing is to provide a framework within which respondents can express their own understanding in their own terms”.

Results from the repertory grid technique displayed on principal component maps (presented in Chapters Six and Seven and Appendix H) provided the framework in which the depth interviews were based. The depth interviews were a means of interpreting clarifying and probing the meanings from the principal components maps. The teachers from whom they were elicited confirmed the truth of the interpretation of the findings of the grids and maps. This triangulation process ensured that the truth resided with the teachers and not the grids. The interview method therefore provided a systematic and comprehensive means of eliciting teachers’ knowledge while providing flexibility to explore for deeper understanding. The flexibility and
adaptable nature of an interview makes it very appropriate for this study which required deep probing for the teachers’ knowledge.

**Preparation for the depth interview**

During the pre-testing of the depth interviews in Australia, teachers and a colleague who completed the grids were re-visited for a depth interview. They first looked at the principal component maps from the grids and talked freely about the relationships displayed on the maps. Special note was made of any cues suggesting they were uncomfortable or did not understand the questions. Additional questions for clarification or confirmation were asked and notes made of these for possible inclusion in the interview schedule. Irrelevant questions were identified and eliminated and adjustments made in terms of the information needed. The interviews were taped and transcribed and the teachers given the opportunity to confirm and clarify their ideas. The time needed for transcribing the interviews was observed and awareness of problems associated with the use of a tape recorder were noted. The length of time the interviews took was also noted so that other teachers could be aware of the time schedule needed for the interviews.

After the depth interviews the respondents were asked to evaluate, in writing, the content, clarity and sequencing of the questions. The questions were revised and the sequence and procedure reviewed. For example, questions identified as leading, were rephrased and reviewed. Several teachers suggested that they should be able to view the questions with the researcher before taping since this allowed them to think about the answers in advance and not have to stumble over the unexpected. This suggestion was
incorporated into the depth interviews. The researcher was familiar with the interview technique having used it in previous research but pre-testing provided a refresher course in terms of the problems that may be encountered during the interviews.

Data Collection Process

There was a term's delay in the arrival of the researcher in Barbados and the commencement of the data collection process. On arrival in Barbados at the beginning of the second term of the 1995 to 1996 school year a second letter was sent to the Ministry of Education informing them of the delay and supplying a copy of the revised proposal.

Pre-testing the repertory grid technique and depth interview in Barbados

Before commencing the data collection process in Barbados the repertory grid technique and depth interview chosen were tried with Barbadian teachers to identify any difficulties that may be encountered in implementing the grid in Barbados. One of the teachers who worked with under-fives consented to testing of the process of implementing the repertory grid and the interview schedule. The testing took place in the home of the teacher because it was vacation and the schools were closed. The home context presented many distractions in terms of family interruptions, focus and concentration. It was decided that as far as possible, completion of the repertory grid and all subsequent interviews would in the future be held in the school environment. The teacher also confirmed that the full context form was challenging and interesting. In this technique the elements, written on separate cards were
spread out on a table and she was asked to think of and group the elements anyway she liked.

The process of laddering, involving the use of ‘how’ and ‘why’ questions in order to enable the respondents to reveal more and more about their preference for a particular construct, was tried in order to elicit more stable core constructs or constructs that were resistant to change. For example, if the teacher associated an element with *I like*, this may be probed by asking “Why do you like this practice?” and, “How is it used in your classroom?” The teacher was also asked to identify any areas she felt could be improved. Valuable hints on the implementation process were gained and necessary modifications made. For example, questioning the similarities and differences among the groupings, the laddering techniques, and eliciting the opposite pole were tried and modified. After analysis of the grid for this teacher, adjustments such as the limited use and importance of zero, were noted.

This pre-testing process in Barbados also helped to clarify local problems and although it did not eliminate all problems it did help in understanding the difficulties that may have been encountered in the field. The pre-testing of the repertory grid and depth interviews at the local level revealed that consideration of the time needed to complete an interview was important. The researcher was aware of the limited time for data collection and the time consuming nature of the grid and follow up interviews. The monetary and time cost involved in the transcribing and postage, as well as travelling to various school settings all over the island were also noted. This pre-testing process also made the researcher more fully aware of the teachers’
willingness to talk, the problems they encountered and the need for such a study in Barbados.

Data collection process in Barbados

The Ministry of Education in Barbados sent a letter to the primary and nursery schools. This letter, along with the one received by the researcher from this Ministry, proved very effective in gaining the participation and full acceptance of principals and the initial 23 teachers who agreed to participate in the study (Appendix A). Despite the delay most of the principals still had on file copies of the letter they received from the Ministry of Education. Those who did not said they did remember the letter and asked for a copy for their files. All twenty-three principals contacted in the initial stages expressed their willingness to participate, subject to the desire of the teachers.

Since letters were sent to the school granting teachers permission to participate in the study, it was quite convenient and arrangements were made to interview the teachers at their individual schools.

Implementing a ‘full form’ repertory grid technique

Since a repertory grid is an acceptable technique that may be used in many different ways (Fransella and Bannister 1977) it was developed and adapted to meet the specific needs of the teachers in Barbados. The main areas of adjustment were the form of construct elicitation and the format in which the teachers were to respond in terms of rating the grids and eliciting the opposite pole. These are explained in the following sections.
Eliciting the teachers’ constructs

The full context form of the repertory grid was used individually with each of the 23 teachers who agreed to participate in the study. Briefly, in this form, all elements written on separate cards were spread out in front of the teachers and they were asked to think about them individually and group them. They were asked in what way the elements in one group were similar to each other, yet different from another group. They were asked, for example, to consider the similarities and differences in the elements in terms of the content, the pedagogical actions and their roles in achieving classroom goals. As subsequent cards were added, or groups formed, the teachers were occasionally asked whether it was still the same category as for the first two groups of cards. If one was taken away the teachers were asked if the same category was being used.

Obtaining the opposite pole

The researcher wrote words and phrases used by the teachers as they explained the similarities and differences between and among the groups of elements. To elicit more stable core constructs, that is, those constructs that were resistant to change, the laddering technique, which involved asking “how” and “why” questions about the elements was used. Examples of probing questions included “Which of these groups of practices are more alike? Why? In terms of how you teach and the actions you use in your classroom how are these two groups of practices alike, but different from another? In terms of the role the practices play in achieving your goals, how are those practices in one group alike, yet different from those in another?
The distinguishing and characterizing terms and phrases were recorded on the grid and became the constructs as used by the teachers. The researcher discussed with them the meaning and use of each construct.

After each construct was recorded the teachers were told what was written and if there were no objections they were asked to supply a contrasting pole for the elicited construct. As a result, queries such as “how did I use the terms in that context?” (as experienced during the pre-testing stage when the elicitation of the opposite pole was delayed) were eliminated. The teachers were asked whether the opposites given were a reflection of what they considered the opposites to be as they pertained to the element being construed. The opposites were elicited immediately after the stated construct was given ensuring that it was captured within the context of the particular practice and its relation in the context of the classroom. These opposites were changed on more than one occasion as the teachers reconsidered the constructs that would better serve as an opposing pole. For example one of the teachers construed the differences among groups as Should be used, initially gave the opposite as Should not be used but when asked to confirm the same changed it to Sometime used.

This conversational grid technique ensured that the six assumptions outlined by Kelly (1955, p.229) were met. These assumptions include the following:

- the construct elicited was permeable, that is, that the teachers were able to apply the construct elicited to the practices other than the “grouped elements” from which the construct was elicited;
• the pre-existing constructs were elicited;
• the verbal labels attached to the constructs were communicable;
• the constructs elicited were representative of the teacher's understanding of
  the way other people looked at teaching, that is role constructs were elicited;
• the teachers did not dissociate themselves entirely from the elements or the
  constructs elicited, they were encouraged to see themselves somewhere along
  the construct dimensions; and
• constructs elicited were explicitly bipolar, that is, they stated the opposite pole.

Implementing the rating

The teachers were asked to rate each element on each construct using a
scale of 1 to 5. For example in Figure 4 below, the element *Child Initiated*
was rated a 1 for its association with the constructs *I believe* on the left pole.
It was rated a 5 for its association with *Difficult* and *Confuse children*.

Each teacher wrote a number between 1 and 5 on the grid sheet to
show how each element was associated with each construct or its contrasting
pole. With those constructs that presented a problem when used with a specific
element, the teachers were asked to use a zero to indicate that the construct
could not be applied. In the first two interviews, the use of zeros presented a
problem.

Teachers were quite willing to resort to a zero without thinking of the
various ways in which an association could be made. With further probing
and discussion on the use of the zeros, the teacher discovered that the
construct and element could be associated and fewer zeros were used. In
subsequent interviews the use of zero was discussed fully before the teachers
started the grids.

FIGURE 4: Repertory grid showing the ratings of the supplied elements on
elicited constructs.
The length of the interviews varied and was influenced by the teacher's understanding of the task and the context. The majority of the teachers, who understood the rating process, were left alone to complete the grid. Help was only offered when requested by the teacher. For these teachers who understood the task from the initial stages, the interviews lasted for one to two uninterrupted hours if it was held in a room with just the teacher and the researcher. However, a few teachers found the repertory grid interviews difficult in the rating stage and they needed much explanation. Those teachers, who found the rating of the elements and constructs taxing, were guided through the first few constructs until they appeared to understand. Two teachers felt that following the boxes in the grid was difficult and they were helped during the entire rating process. It was at this stage that one of the 23 teachers said that she did not want to continue to participate in the study because she had to "think too much". She was thanked for her participation and the school was withdrawn from the study.

The interviews lasted from one and a half, to three hours, depending on whether there were interruptions. For the majority of teachers who completed the grid while still trying to manage their classes, the time period was longer ranging from two to three-and-a-half-hours. This was because the teachers often had to stop to keep order or change activities and supervise and have lunch. In some schools this could not be helped because there was often a shortage of staff and no teacher could be found to hold the particular class at the time of the interviews. Despite the long length of time many teachers expressed interest and enthusiasm and aimed to complete the task. Those who
were interrupted apologized for this and were able to return to the task with little or no difficulty.

Generally, once the teachers understood the task, the researcher offered, with the consent of principal, to work with the class as the teacher completed the rating aspect of the repertory grid. The researcher however was freely available to discuss any problems teachers were experiencing. Whenever the researcher stopped to discuss the grid with the teachers, the pupils, who were totally dependent on the teacher in terms of what to do next, made constant demands. This resulted in a longer time at the task. The researcher found that the few interviews completed alone with the teacher had the advantage in terms of continuity and time.

It must also be noted that the approval of the Ministry of Education in Barbados might have been a barrier to the respondents participating in the study. Some voiced concerns about who would read their comments within the Ministry of Education, and only after the assurance of confidentiality and anonymity, did they appear to freely express themselves in the grouping and discussion of the elements.

The teachers commented that they found the task thought provoking, reflecting, and encouraging of deep thinking. They admitted having to think about what they did in the classroom in ways and from angles that they had never thought of before and they were pleased to have had the opportunity. The majority of the teachers expressed surprise during the initial stage of each depth interview when they were shown the results of the grids. They expressed their amazement that the task of rating elements and constructs
produced a principal component map (Appendix E), which matched their constructs to the elements so well. Many confirmed that the principal component maps did indeed depict their associations of the elements with their constructs.

**Grid analysis**

Principal components analysis (Eckart & Young, 1936) was used to analyze the 22 completed grids. In principal components method of analysis the higher the percentage of variance accounted for by the first principal component, the more unidimensional is the individual's construing. In general, on the principal component map, the distance from the origin is a measure of importance (Slater, 1977). The elements in opposing quadrants of a subject's principal component map can be considered to be most dissimilar, while those furthest removed from the origin are the most extremely perceived.

Figure 5 below is an example of a principal components map from the study chosen at random. The researcher, to show the groupings of elements and constructs, used circles. In grouping 2 Child Centred, Child Initiated, Free Choice, Integrated approach Teacher Directed, Formal. Concrete, Informal, Real Life Objects are associated with Easy for teaching, Not always possible, Inadequate, Done most of the time, Cannot teach like this. In grouping 4 the association of Separate Subjects with constructs Depends on the child, Not always possible, Get around to individuals and More adequate. The constructs Help teacher to plan in group 3, is associated with Individually. The plot does not provide a complete picture of the subject's
constructs system as it is based only on the percentage of variation (77.84%) accounted for by the first two components in the grid. It does however provide a useful indication of groups of elements and constructs and how they interrelate, especially if the third and higher components do not account for much percentage of variance. The discussion of the data presented in each of the respondents' principal component maps is presented in Chapter Seven and Appendix H.

FIGURE 5: Principal components analysis of elements rated on elicited constructs
Survey of background information

At the end of the grid interviews the teachers completed survey sheets with information about themselves, the schools at which they taught and under-fives in these settings. They provided personal information, which included their age, sex, number of years in teaching, qualifications and training. They also identified the number and range of under-fives in each setting, and the location of the school. This data was obtained at the end of the data collection period because as Patton (1990) suggested, these types of questions have a tendency to be boring. The teachers completed these with little or no difficulty. A copy of a completed survey form is in Appendix E.

Depth interview procedure

The depth interviews commenced at the beginning of the third term (March 1996). Three of the teachers who completed the repertory grid interviews were on leave and could not be located at schools for the depth interviews. One of the three was on sick leave and another on long service leave and they both consented to having the interview at their homes. The disadvantages of the home settings noted during the pre-testing stage were explained to the teachers who promised to provide quiet and uninterrupted environments for the interviews. The third teacher was on sick leave but did not consent to a home interview but instead suggested that the interview could be done when she returned to work. Weekly calls to the schools indicated that she was still on sick leave and no confirmation date for her return could be given. When the depth interviews with the other teachers were completed and
close to my departure for Australia, no connection had been made with this teacher. After a discussion with the principal the decision was made to omit her from the study. A note was left with the principal for the teacher, explaining the time limit and travel plans of the researcher, and appreciation for the part played in the repertory grid technique.

In order to validate, clarify and confirm the findings of the grids, depth exploration and analysis by the teachers was needed. After the analysis of the grid, the teachers were given the opportunity, during depth interviews, to further explore the data in the principal component maps. The depth interviews allowed for deeper probing into the teachers' personal practical knowledge, especially as it related to under-fives and the relationship between the constructs and elements. The non-schedule-standardized interview questions (Appendix D), as noted earlier, ensured that questions requiring certain types of information were asked but the particular phrasing of the questions and their order were redefined to fit the characteristics of each teacher. The questions were semi-structured and unstructured in nature. The semi-structured questions were very specific in content and phased to allow the teachers to give individual responses. The unstructured questions allowed the teachers great latitude in talking freely about the findings on the principal component map and the grid matrix. The combination of the semi-structured and unstructured questions allowed for a high degree of probing and clarification.

The teachers were encouraged to talk freely about the data on each principal components map and explain their personal practical knowledge.
underpinning the groupings on the map. They were asked about under-fives in their settings and their presence in schools. They were encouraged to link their views about under-fives to the pedagogic practices construed in the grids. The constraints and opportunities influencing their personal practical knowledge about under-fives and pedagogic practices were explored in depth. The teachers’ personal practical knowledge about the importance attached to the inclusion of their views in the reforming and planning of education was also sought. Recent developments in, and the Ministry of Education’s plans for early childhood education in Barbados were also explored along with the teachers’ anticipation of future developments in early childhood education.

The depth interviews were audiotaped, and because of the noise and interruption problems encountered with the repertory grids, a request was made to each principal for the teacher to be freed of her class and for the interview to take place in a quiet area. All principals and 21 teachers left in the study co-operated fully with the researcher’s request and provided the environment needed for the depth interviews.

Before beginning the interview, the questions were reviewed as suggested in the earlier trial with the teacher in Barbados, and the respondents were asked whether they had any questions or concerns. The respondents were reminded that they were being taped and, despite the fact that a few showed some apprehension, they gave their permission. They said they were prepared for the use of the recorder especially since they had been asked and had given consent during the repertory grid sessions. The questions as outlined in the interview schedule, were sequenced to suit the individual
teacher. Probing for further clarification of an answer was used mainly with the unstructured question related to the grid analysis. Time was allowed for the respondents to respond to each question. After all the questions had been answered the respondents were thanked and many of the teachers made comments in general about their teaching and the need for teachers to express their views. Some respondents asked for advise on teaching, which the researcher did not give so as not to influence the teachers. Other teachers extended an invitation to their classrooms for observation of layout and activities provided for under-fives. In general, the teachers cooperated very well and all interviews ended in a positive manner.

Twenty-one interviews were transcribed verbatim from audiotapes, by two independent transcribers and the researcher. The researcher, to confirm accuracy, reviewed each taped interview with its transcript. Each interview was then typed into a computer in a separate file, and a printout of the text obtained. The typed pages for the interviews were singled spaced and ranged from ten to twenty-five pages in length.

As a member check, (Patton, 1990) the 21 teachers who completed the depth interviews were promised a transcript of their responses. The interview transcripts were returned to, and left with, the teachers and they were asked to make any corrections, changes or modification for the purposes of clarification and verification. Most of the teachers were satisfied with their comments. However two teachers were concerned with the way they had spoken, and while one of them corrected her grammatical errors, the other rewrote her
answers. The teachers were all given a corrected version of their interviews. A sample of a transcribed interview is in Appendix F.

**Time span**

The grid and depth interviews were conducted during terms two and three (January to July) of the 1995 to 1996 school year which runs from 1 September 1995 to 31 August 1996. Table 3 gives a description of the phase, the participants and methods of preparation and collection of data used in the study.
Table 3

The time phase and methods used in the collection of data about the teachers' personal practical knowledge

<table>
<thead>
<tr>
<th>PHASE</th>
<th>METHOD</th>
<th>PURPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>Pre-testing of repertory grid technique and Depth interviews</td>
<td>Identification of elements for the repertory grid. Posting list of elements to a teacher in Barbados for distribution to others for reactions, contributions and modification. Pretesting with colleagues in early childhood education at Edith Cowan University, a class of early childhood teacher at Edith Cowan University, teachers at preschools in Perth, Western Australia. Development of the grid in response to pretesting suggestions.</td>
</tr>
<tr>
<td>Phase 2</td>
<td>Pretesting of the modified repertory grids technique and depth interview</td>
<td>Pretesting the grid with a teacher in Barbados. Trial of the full form repertory grid technique. Analysis of the same. Depth interview based on the data in the principal component map derived from the repertory grid. Modification of questions and techniques for the grid and depth interviews. Analysis of the depth interview.</td>
</tr>
<tr>
<td>Phase 3</td>
<td>Implementing the full form of the repertory grid technique and survey</td>
<td>Implementing the repertory grid with twenty-three teachers in Barbados. Analysis of the repertory grids. Completing the survey sheet.</td>
</tr>
<tr>
<td>Phase 4</td>
<td>Implementing a non-scheduled standardized depth interviews</td>
<td>Conducting the depth interviews with twenty-one teachers left in the study based on the data in the repertory grids and the principal component maps and the questions outlined in the non-scheduled standardized depth interview. Transcribing recorded interviews and returning these for confirmation and verification. Returning corrected copies of interviews to each teacher. Analysis of data.</td>
</tr>
</tbody>
</table>
Data analysis

Preliminary data analysis of the grids, surveys and depth interview transcripts began by considering various ways in which data could be analyzed. Principal components analysis was used with the repertory grids to reveal specific relationships between elements and constructs. This technique maps elements and constructs in the same metric space, which for convenience, is displayed as a two-dimensional figure (presented in Chapter Six and Appendix H). The interpretation of the map requires the presentation of the percentage of variance explained by each of the two components, since elements and constructs may appear close on a two dimensional diagram but in reality be separated by a considerable distance on the third or higher component.

Each teacher was asked to explain the groupings of elements and constructs identified on her principal component map. After analysis of the grids, a composite picture of the 358 elicited constructs was achieved when the researcher placed the elicited constructs into groups by assigning meaning to each left-hand construct label, thereby making groupings or themes that were essentially those of the researcher. The groups of constructs established, provided a basis for the analysis of the depth interviews transcripts. This data is detailed in Chapter Six and Seven.

After the teachers amended interviews, they were coded initially according to the themes derived from the grouping of the constructs established by the researcher. The printed texts of the 21 interviews were sorted manually, with a specific construct group labels used in the margin to
highlight areas related to a theme. For example the construct group label

*Consideration of the child* was used to note areas in a text that appeared to illustrate the theme. The sorted texts were then identified, printed and filed in the appropriate folder for each category. The sorted data were also stored on computer, referred to by page numbers, and then cut and pasted into the written text when needed. The five major themes were broken down into sub-themes as the coding was fined tuned. For example, one of the major themes derived from the grouping of the constructs was *Consideration of the child*. This theme was divided into sub-themes such as *Need for under-fives in schools, Development of under-fives*. The data from this process is presented in Chapters Six and Seven.

Although computer analysis programs could have been used the researcher decided to use this manual method of filing because the number of interviews were manageable. The researcher found this method time consuming but rewarding since it also allowed for familiarity with the data and allowed for identification of ideas made by individual teachers. For example, the researcher became so familiar with the data, that particular text to illustrate a theme could be identified by teacher, page or quotes of individual teachers.

Validity and Reliability of the study

LeCompte (1982) argued that qualitative investigations have been criticised because they fail to adhere to positivistic canons of reliability and validity. To ensure that research is considered valid, credible and trustworthy, she argued that reliability and validity should be addressed in the design, collection and analysis of a study. LeCompe (1982) and McMillan &
Schumacher (1989) agreed and noted that qualitative research was considered valid, credible, and trustworthy to the extent that the canons of reliability and validity were addressed in qualitative terms when the inquiry was designed, conducted and the findings interpreted.

Credibility in qualitative research often refers to the use of appropriate definitions of research criteria - reliability, internal and external validity in the inquiry (McMillan & Schumacher, 1989). They further argued that definitions of validity and reliability in qualitative research assume that the meaningfulness of human actions depends on the contexts or situations in which these actions, feelings and perceptions occur. In this qualitative study the research was discovery oriented, assisting the researcher in understanding the emerging personal practical knowledge of the teachers from their particular situations.

Reliability of the study

Reliability often refers to the extent to which studies can be replicated. It has been argued that the criteria for qualitative research differ from that of quantitative research. While reliability in quantitative research refers to the consistency of the observations, the criteria for qualitative research ensure conditions of reliability and validity are established.

McMillan & Schumacher (1989) explained their criteria for reliability in qualitative research by referring to the consistency of a researcher’s interactive style, the data recording and data analysis process, as well as the interpretation of the participant meaning in the data. They noted that to obtain consistency in the description of naturalistic events and its meanings for the
participants, the reliability issues must be handled by the researcher during all phases of the research, design planning, data collection and formal data analysis. These authors also argued that in qualitative research because of the individualistic and personalistic nature of the qualitative process, as well as the uniqueness or complexity of the phenomena, reliability is a difficult task. They maintain that human behaviour is never static and no study can be replicated exactly (McMillan & Schumacher 1989).

To ensure reliability in this study, the researcher used strategies that ensured consistency throughout the research in terms of the description of the naturalistic events and its meanings for the participants. Descriptions of the researcher’s interactive style, data recording, data analysis and the range of techniques used in the study to supplement and collate the findings have been described earlier in this chapter. Interpretations of the participant meanings in the data are presented in Chapters Six to Eight.

Within this study a description is given of the role of the researcher and the interaction that took place between the researcher and the teachers, which ensured consistency in interactive style. All efforts were made to ensure that the researcher made no judgement, personal views and opinions and that a cordial but friendly relationship developed between the researcher and each of the teachers. The teachers were allowed the time and freedom to share their views uninterrupted and they were then asked questions outlined in the non-scheduled standardized interview sheet, in the further elicitation of their personal practical knowledge.
Consistency in data recording was maintained through the use of the same procedure and recording devises with each teacher. The inconsistency in terms of the need for some teachers to supervise their classes during the repertory grid as oppose to those who did not could not be avoided. Breaks in the implementing process seemed to have had no noticeable negative effect on implementing the grids, except in terms of the time spent conducting the interview. Each teacher was able to return to and complete the task with enthusiasm. The same data analysis procedure was used for all the information gathered. All repertory grids were analyzed with the same computer program and the themes gathered from the similarities in the elicited constructs were used in the sorting of the depth interviews. The interpretation of the participants' meaning was maintained through the use of recording information collected and returning the same to the teachers for further feedback, clarification, confirmation or a member check.

Guba (1978) identified three types of problems which a researcher may encounter in the acquisition of information using naturalistic method of inquiry, and which may be a threat to reliability. These are boundary problems, focussing problems and problems of authenticity. Boundary problems occur when no clear criteria for the selection of the sample are identified. In this study, boundary problems were solved by classifying all the primary, infants and nursery schools with nursery classes and then identifying at least one with a nursery class in each parish.

Focussing problems occur when the researcher is not sure of the willingness of the respondents to participate in the study, and therefore does
not know definite times and places in which the data will be collected. The problem of focussing was controlled by contacting the potential respondents by telephone, enabling them to confirm their willingness to be involved in the study as well as the arrangement of times for the interviews that were suitable for the respondents. The teachers were still given the freedom to withdraw from the study at any stage. For all purposes, interviews occurred during school except for three occasions where the teachers were on vacation or long leave and the interviews were conducted in their homes.

Authenticity relates to the reliability of source of the information, whether the individual is genuine and worthy of trust. It is difficult to determine if an individual is authentic. Some teachers did express concerns about who could access the information and whether they would be identified. The assurance of confidentiality and anonymity and the teachers’ interest in the grids, their spontaneous and thoughtful responses, their enthusiasm and willingness to share anecdotes and reflect on previous responses, their explanations of conflicting information and eagerness to suggest ways of reforming the system, did suggest that they were engaging in genuine dialogue. The teachers were also given a copy of their transcribed interviews and asked to confirm and clarify their views.

External reliability

External reliability is described as the extent to which independent researchers would discover the same phenomena in the same or similar situation (LeCompe & Goetz, 1982; McMillan & Schumacher 1989). McMillan & Schumacher (1989) noted that some researchers claim that no
qualitative study can be reliable in the positivistic sense since “the
development, refinement, and validation of qualitative findings may not
require replication of events” (p. 189). They suggested that making explicit
five aspects of the design can enhance external reliability, these include the
researcher role, informant selection, social context, data collection and
analysis strategies, and analytical constructs and premises. These are
considered in the following sections.

**Researcher's role**

LeCompe & Goetz (1982) argued that the researcher’s role and status
within the group should be identified. In this study the researcher’s role and
status were described in the first part of this chapter. It was noted that the
researcher as a citizen of and educator in Barbados, was able to empathise
with the teachers in the study. In addition, the researcher conducted all the
interviews and interpreted the results and the findings.

**Informants' selection**

McMillan & Schumacher (1989) noted that informant selection as a
threat to reliability can be avoided through careful description of the
informants and the decision process used in their selection (LeCompe &
Goetz, 1982). They explained that for replicability, this process allowed
another researcher to contact individuals similar to those who were informants
in the study. Earlier in this chapter and in Chapter Five a description of the
teachers and the sampling process used was explained. As explained earlier,
the twenty-two teachers who participated fully in the study were chosen
through the process of “reputational case selection” (McMillan &
Schumacher 1989, p. 184) a strategy involving a knowledgeable person making recommendations to the researcher. In this study a local person from the Ministry of Education recommended schools with early childhood classrooms to the researcher. The teachers made final decisions as to their willingness to participate in the study. The teachers at all the schools visited were females and this is the usual situation in early childhood classes in the island.

Social context

Social contexts influence the content of the data and McMillan & Schumacher (1989) noted that to enhance external reliability, the contexts should be fully described physically, socially, interpersonally and functionally. The thesis started with a description of the overall contexts. In the next chapter the researcher gives a description of each context, based on what was seen when the schools were visited for the interviews. The chapters following give an account of the teachers' personal practical knowledge about a range of pedagogic practices used in the education of under-fives in their various teaching contexts.

Data collection and analysis strategies

LeCompte & Goetz (1982) and McMillan & Schumacher (1989) note that replication is impossible without precise identification and thorough description of the strategies used to collect data. The techniques used in this study were described in the first part of this chapter as were the strategies for analyzing the data.
Analytical premise

McMillan & Schumacher (1989) noted that the primary safeguard against unreliability is making explicit the conceptual framework which informs the study and from which findings can be integrated or contrasted. A full description of the underlying assumptions, theories and the conceptual framework that informed the study are given mostly in proceeding chapters and throughout this thesis. Theories setting the framework for the study, areas of concerns and the relationship between the factors leading to the personal practical knowledge of the teachers have been explained in Chapter Three.

Internal reliability

In qualitative research, internal reliability addresses whether within a single study, multiple participants agree. Since several sites were used, it was critical to reduce the threats to internal reliability. Low-inference descriptors, which include audio recording of verbatim accounts of conversations, transcripts of depth interviews, documents and concrete precise descriptions from field notes were used to capture the teachers' personal practical knowledge. To further facilitate accurate accounts of the findings, transcripts were returned to the participants for their scrutiny. The knowledgeable person from the Ministry of Education supplied additional contextual information by explaining the contexts of the infants, nursery and primary schools and explained the overall processes of early childhood education in Barbados. In addition, the integration of descriptions of the education system from documents produced by the Ministry of Education as explained in the
background to the study, were included. The publication of the results would allow for peer reviewing of the thesis.

Validity of the study

Validity ensures that that the propositions generated, refined or tested match the causal conditions which prevail in human life (LeCompte & Goetz (1982). Internal validity was described as the major strength of qualitative research and is defined in terms of internal and external validity.

Internal validity

Internal validity refers to whether the researcher observes or measures what is being observed and measured. The confirmation of the degree to which the conceptual categories such as an Informal and Formal approaches held mutual meanings between the participants and the researcher, was examined. Some of the threats to the internal validity of this study in terms of the history and maturation, observer effects, selection, mortality and alternative explanations, as noted by McMillan & Schumacher (1989), are explained in the following section.

History and maturation affect the nature of the data collected especially since events rarely remain constant. History affects the general social scene (McMillan & Schumacher, 1989) so the researcher described and documented the teachers' individual contexts at that given time. Maturation as a normative process, affects progressive development in well-defined stages of the individual, both mentally and physically. Given the short data collection time, this was not a problem, but the sources and nature of the teachers' knowledge are described for comparison in any future research.
Observer effect relates to the impact the researcher may have on the respondents and their practical, personal knowledge. In this study the data collected from the teachers represented their particular views, and all efforts were made not to influence these. To minimize this source of invalidity, the research spent six months in the field. The time spent in the data collection process also allowed the teachers to become accustomed to the presence of the researcher. The promise of confidentiality and anonymity also allowed the teachers to be freer and more confident in their self-expression. Mortality, that is the loss of respondents in the study, was treated as a normal event. Two teachers did not complete the study and were not replaced because, as McMillan & Schumacher (1989) explained, human participants are not interchangeable.

The claim to high internal validity is derived from the data collection and analysis techniques used in the study (LeCompte & Goetz, 1982; McMillan & Schumacher, 1989). The following strategies, noted as those that increase internal validity, were used in the study.

A lengthy data collection period provided the opportunity for continual data analysis, interpretation and corroboration to refine constructs and to ensure that there was a match between the categories used in the research base and the teachers’ realities in terms of their personal practical knowledge. The teachers’ language was used throughout the study since this was less abstract and provided vivid descriptions of the teachers’ thinking. The field research took place in the ‘natural’ settings in which the teachers worked and which reflected the reality of their personal practical knowledge. In addition the
researcher used 'disciplined subjectivity' or self monitoring (McMillan & Schumacher, 1989, p. 192) which entailed submitting all phases of the research process to continuous and rigorous questioning and revaluation.

Providing richness of the data in the presentation of data and describing the research context also ensured the internal validity of the study. As a result, the data collected may be problematic only if there are claims for its representation beyond the contexts from which it was gathered. The time spent in the data collection process also allowed the researcher to corroborate the data, and gain the teachers' reactions and confirmation of their views. In addition, in the selection process attention was paid and explanations given to how purposeful sampling was used to identify the teachers in the study.

External validity

External validity deals with the generalisation of the results or with whether the findings are applicable across groups. The teachers interviewed in this study were from 21 different schools in the island. This study does not aim at generalisation of results but is an extension of the understanding and detailed descriptions of the teachers' personal practical knowledge about a range of pedagogic practices used in the education of under-fives in terms of the various teaching contexts. Rich description allows the reader to make decisions in terms of the generalisability of the findings. Descriptions of the phenomena, which are likely to be useful for comparability and translatability, are given. To ensure comparability to research, components including the sites, the participants, the documents used, the analysis process and the concepts generated are well described and defined. To ensure translatability,
the researcher’s use of theoretical frameworks and research strategies is explained so that those in the same or similar field can replicate the study.

Detailed descriptions of the distinct characteristics of the teachers are given in Chapter Five and Appendix H, as well as the historical settings and the possible effects of these settings on the teachers’ thinking. In addition, attention is paid to the attributes of the teachers as groups, the time period and the settings, so as to alert other researchers in the use of the findings, and to furnish rich description.

Validity and reliability of repertory grids

Kelly (1955) described reliability as that characteristic of a test, which makes it insensitive to change, and validity as the capacity of a test to tell us what we already know. The grid is a format in which data is placed, which can reveal if there is pattern or meaning to the data. The grid is not a test. Kelly (1955) argued that forms of grids are attempts to inquire into a person’s construct system, and since man is a form of motion and not a psychologically static object, then change is of the essence. In this sense reliability and validity must be understood in terms of the psychological characteristic of people and not of a test (Bannister & Fansella, 1980). Winter (1990) argued that Kelly (1955) was more concerned with the consistency of the repertory grid than with traditional reliability, and with usability more than validity. Bannister & Fansella (1980) too noted that the idea of a static mind is a contradiction in terms and the grid should not be looked at as a means of repeating the same results but to see when it shows change and what it is signifying. They saw reliability as merely one aspect of validity.
As there is no standard form of the repertory grid, Winter (1990) and Bannister and Fransella (1980) argue that it is fairly meaningless to make any general statements about the grid’s reliability and validity. Slater (1974) has pointed out that common methods of assessing reliability of a psychometric technique were designed with nomothetic tests in mind. These methods were inapplicable to a repertory grid except when they were constructed for general use, since a grid is a qualitative procedure like an interview.

However to ensure that the repertory grids were a valid measure of personal constructs, Bannister & Fransella (1980) noted characteristics which may provide indications of the validity and reliability of grid measures. Testing the hypotheses derived from personal construct psychology and testing assumptions about grid methodology was believed to be one measure of validity and reliability. In this study the conceptual framework reflected the assumptions of construing as outlined in personal construct psychology. Two possible ways of implementing a grid technique was also tried.

Bannister & Fransella (1980) report some reliability figures. They estimate the value of the grid, not in terms of its high or low reliability but whether or not it is an instrument which enable the researcher to effectively inquire into changes made in construing. In this study the depth interviews allowed for further investigation of changes or stability to the construing of a range of pedagogic practices as presented in the grids and principal components analysis.

Bannister & Fransella (1980) noted that since the grid has no specific content, validity could only be talked about in terms of whether or not it will
effectively reveal patterns and relationships in certain kinds of data. They noted that the researcher's direct experience in terms of the value or usefulness of the grid is one way of measuring its validity. In this study the researcher communicated her experiences of using the grid as a mode of exploring the of the teachers' knowledge, thereby providing the opportunity for others to grasp and make further use of the strategy as a method of eliciting information.

Ethical considerations

Since teachers in this study were a part of the Barbados Government school system, approval for conducting the research in these schools was needed and was sought from the Ministry of Education in Barbados before collecting any data. Detailed information was given to the Ministry about the role the teachers would play, the role of the researcher, the length of time and use of the interviews and the use of the findings.

Of great concern to the teachers in the study was the matter of confidentiality and anonymity. These ethical concerns were catered for by the selection of a large sample of teachers in different geographical locations and ensuring that the names of teachers never appear on transcripts or grids or in the final report. This was accomplished by collecting the data anonymously and using a system of coding each respondent's response by letters and numbers. For the final report each teacher was randomly assigned another name which was used throughout the presentation of findings. A confidential record of the names and addresses of schools were kept in a file available only to the researcher.
Respondents were assured that they would be provided with the opportunity to receive the results of the study in which they were participating.

All information recorded in the grid interviews and depth interviews were transcribed and returned to the teachers for their confirmation, clarification and member check. This ensured validity, confirmation and clarification of teacher’s thinking and ensured the dispelling of anxiety expressed by some teachers in terms of what they said and later read. The teachers were free to change or have omitted anything they did not want included in the reported interviews. They were assured that the data gathered would not be used for any purpose other than that outlined for the study. Audiotapes and written transcripts were securely stored and accessible only to the researcher and supervisors. All records will be destroyed in five year’s time.

Informed and voluntary consent was secured from the teachers before they participated in the research. Informed consent was achieved by providing them with an explanation of the research, an opportunity to terminate their participation at any time with no penalty. Consent was obtained by asking the subjects to sign this form that indicated their understanding of the research and their desire to participate in it. A copy of the disclosure and informed consent form is in Appendix C.

Another ethical concern was freedom of choice. The teachers were informed of the purpose of the study and the freedom to withdraw at any time or at any stage of the study. One teacher took this option during the repertory
grid interview, explaining the 'need to think too deeply' in the completion of the grid, as the main reason.

Conclusion to the chapter

This chapter described the data gathering techniques used in the elicitation of the teachers' personal practical knowledge about a range of pedagogic practices used in the education of under-fives. It outlined the data collection process used in the study, and discussed the issues of validity and reliability of the techniques used within the framework of qualitative research and a repertory grid technique.

The next chapter presents the data collected in the survey of the background information, thereby providing background and demographic information about the teachers and the contexts in which they construed the pedagogic practices used in the education of under-fives.
CHAPTER FIVE

The Results of the Demographic and Background Survey

Introduction

This chapter presents demographic data gathered from the teachers through the survey. This data comprise the types and locations of the schools, age ranges of under-fives and the number of children in each class. The teachers' background variables include information about their ages, gender, teaching experiences, training and qualifications. These data provide detailed information about the individual teachers in the sample, and the contexts in which the study was done.

The types and locations of the schools

Of the 87 elementary schools that embraced primary, nursery & infants schools at the time of this study, 42 schools had nursery age children, that is, children three years and older but younger than five years. From these 42 schools, twenty-three were recommended because of their locations and programmes for under-fives. The selection included at least one school in each parish, therefore covering the rural and urban city districts in the island. In this study because of the small size of the country and the inability to establish clearly the city and urban districts, these were combined for categorising purposes and located in the parish of St. Michael.

Of the 23 schools chosen initially, 6 were recommended in the urban and city district in the parish of St. Michael. Of these, 4 were government nursery schools that catered solely for under-fives. These schools, with their own principals and staff, were housed separately and apart from, but within
walking distance of primary schools. A local informant from the Ministry of
Education recommended their inclusion, describing them as 'models' in the
education of under-fives. The two other schools in St. Michael were primary
schools with nursery classes.

Fifteen schools were chosen from the rural districts, that is the parishes
outside of St. Michael (see Figure 1). Of these, two schools were infant
schools and thirteen were primary schools. The 15 primary schools in the
sample, catered officially for children 5-11 years, but in recent years have
incorporated under-fives. The two infant schools catered for children aged 3
to 7 years. The infant schools were usually located within walking distance of
a junior school, at which the infant school children usually continued their
primary education. Like the primary schools, the infant schools had their own
principal and functioned separately despite sharing the same name as the
nearby junior school.

The two teachers who withdrew from the study were not included in
the results of the survey. These teachers were at two of the 17 rural primary
schools initially recommended for the study. As a result of their withdrawal,
the total numbers of primary schools were reduced to 15. Table 4 gives a
summary of the types and locations of schools involved in the study.
Table 4

Summary of schools by types and their locations

<table>
<thead>
<tr>
<th>Schools</th>
<th>Urban/City</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery schools</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Primary schools with</td>
<td>2</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>nursery classes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infant schools with</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>nursery classes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>15</td>
<td>21</td>
</tr>
</tbody>
</table>

The contexts of the schools

The two infant schools were located in old buildings with open classrooms once owned by the Anglican Church. The government was in the process of closing one of these and amalgamating it with a junior school in a new location in the same parish. The grid interview was conducted in the infant schools and the second depth interview at the new school. There was some difficulty in locating the teacher for the second depth interview since the new school had no telephones installed, but this was resolved through contacting the teacher at home.

Nursery classrooms in the 15 primary and two infant schools were located in facilities that catered for as little as 70 children in a rural district to over 500 children in the city or urban area. Fourteen of the 15 nursery classes in primary schools were located in separate classrooms, while at one school under-fives shared a single classroom with an older age group. At the two infant schools under-fives shared open areas with other classes of children of
different age group. Where the classes were shared, the teachers taught in what appeared to be crowded conditions and the students were assigned to chairs at tables that were fitted in tight clusters in the space available.

In some infant and primary schools the nursery classes had tiled floors while others had wooden floors and plain cemented areas. Two schools had carpets but these were rolled in corners. The teachers explained that because some children were asthmatic the carpet could not be used. Equipment in the majority of these nursery classes was locked away in cupboards. The teachers in these settings explained that this was for security reasons.

In a few nursery classes in primary and infant schools the teacher displayed the resource materials all around the class in centers of interest and these were packed away at the end of the day. They explained that these corners were available to the children at specific times of the day, but mainly for the first half an hour in the morning at the start of the day. In the nursery classes in primary and infant schools the corners varied, with some teachers providing dress up corners, home corners, book corners or art materials and easels. Some of the primary schools with nursery classes had beds or pieces of sponge for rest time in the afternoon. Teachers with nursery classes in primary and infant schools without equipment for sleeping, explained that there was a lack of space in the classroom. Sleeping equipment was not available in the four government nursery schools since unlike the primary and infant schools, they had two half-day sessions with different children in both sessions.
The four government nursery schools were housed mainly in wooden and brick structures, with open classrooms under one roof. The nursery schools had on average six classes of under-fives with no more than twelve children per teacher. There was also a teacher aide serving all the teachers in these nursery schools. In these four nursery schools there was a carpeted area where under-fives and teachers met for large group sessions and morning assembly. During the course of the day each teacher was allotted a space in a section of the building. The teacher’s space for her class consisted of small tables with matching chairs, a few shelves and her materials. The materials included art materials; teaching aids, charts (commercially or locally made), toys and blocks. The nursery schools also had large outdoor playing areas with playground equipment including sea-saws, swings, and slides, climbing apparatus, bicycles and vehicles such as cars and trucks. The centres of interest in these nursery schools were mostly located around the buildings and not in designated classroom areas. The children from all classes were free to visit centres in any area of the schools and these included an aquarium, televisions (one per school) and a dress up or home corner (with small commercial equipment), books, puzzles and blocks.

Time schedules at the three types of schools

The nursery schools were organized on a two-shift system for under-fives with the morning session lasting from quarter-to-nine until 12 o’clock and the afternoon session from one until three o’clock. The primary and infant schools with nursery classes operated on a full time basis from quarter-to-nine until three o’clock. According to the timetables, the four nursery schools, as
well as primary and infant schools with nursery classes followed a similar schedule. They had a free session first lesson in the morning, followed by a large group mat session. This was followed by morning break at 10 o’clock when milk or juice was served or the children ate their own snacks. Small group sessions followed in the four nursery schools, while in the primary and infant schools specified lessons such as Science, Language Arts or Mathematics, or themes based on a project or activities, followed the morning break.

In the primary and infants schools with nursery classes, lunch followed at 12 o’clock, and a hot meal or packed lunch was served. At the nursery schools the 12 o’clock lunch break ended the morning session and parents or guardians arrived to take under-fives home. Another group of children arrived for the afternoon session at one o’clock and they repeated the morning programme with the afternoon groups. In the primary and infant schools the afternoon session consisted of rest and a specific or free choice activities from the centres of interest. An afternoon break at two o’clock occurred at all three types of schools with the school day ending at three o’clock. Table 5 gives a summary of the time schedules at the three types of schools.
Table 5

Summary of the time schedules according to the type of school and given breaks.

<table>
<thead>
<tr>
<th>Schools</th>
<th>Morning Session</th>
<th>Lunch</th>
<th>Afternoon Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery schools</td>
<td>8:45 a.m. - 10:30 a.m. free choice and large group session</td>
<td>End of morning session</td>
<td>1.00 p.m. - 2.00 p.m. - new session-repea of morning session, break</td>
</tr>
<tr>
<td></td>
<td>10:30 a.m. - 11 a.m. break</td>
<td></td>
<td>2.00 p.m. - 3.00 p.m. - end of session</td>
</tr>
<tr>
<td></td>
<td>11 a.m. - 12 noon specified subject areas, themes or activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary and infant schools with under-fives</td>
<td>8:45 a.m. - 10:30 a.m. free choice and large group session</td>
<td>Lunch served</td>
<td>1 p.m. - 2 p.m. - rest time</td>
</tr>
<tr>
<td></td>
<td>10:30 a.m. - 11 a.m. break</td>
<td></td>
<td>2.00 p.m. - 2:15 p.m. - break</td>
</tr>
<tr>
<td></td>
<td>11 a.m. - 12 noon specified subject areas, themes or activities</td>
<td></td>
<td>2:15 p.m. - 3.00 p.m. - specified activities or free choice, end of session</td>
</tr>
</tbody>
</table>

Age range of under-fives

The survey revealed that under-fives were divided into two groups in both nursery classes in primary and infant schools and nursery schools.

Under-fives older than three but younger than four, were in classes together.

At the primary and infants schools these classes were called "nursery" and the children "babies", while at the nursery schools they were considered the three year olds and as a class given the names of birds or something related to nature. Children older than four but younger than five were called "reception" in the primary and infant schools and the four-year-olds in the nursery schools. The age range for the classes in the schools visited was three and four-year-olds in one group and four and five-year-olds in another. In four
instances however, the teachers in rural districts had mixed ability groupings with a range of three to five year olds in one class. The teachers explained and the local informant confirmed that this happened at schools where the ratio of pupil to teacher for under-fives was not significant enough to merit another teacher. In the schools where there were three and four year olds there were also other classes with this age group as occurred in the nursery schools and the four to five age group as was the case in all the primary and infants schools except those with mixed groupings. Of the four schools with mixed groupings, two had other classes with under-fives and at two others, there were no other classes. Table 6 gives a breakdown of the age range of classes according to the schools.

Table 6

The age ranges of nursery classes in the study according to types of schools and age range of under-fives

<table>
<thead>
<tr>
<th>Schools</th>
<th>Age range 3-4 year olds</th>
<th>Age range 4-5 year olds</th>
<th>Mixed groupings 3-5 year olds</th>
<th>Total number of classes for each type of school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery schools</td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Primary schools with under-fives</td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Infant schools with under-fives</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>3</td>
<td>4</td>
<td>21</td>
</tr>
</tbody>
</table>
Class sizes

The number of children in the classrooms involved in the study ranged from as few as eight under-fives to one teacher in a nursery school to 37 under-fives to one teacher in a nursery class in a primary school. The average number of under-fives in the four nursery schools for one half day session was 11, and for the 15 primary and two infants schools the average was 25 under-fives to one teacher. The teachers and local informant from the Ministry of Education noted that the size of the class was dependent on the demand and size of the neighborhoods surrounding the schools. The total number of under-fives taught by the 21 teachers in the study was 944.

The number of children per session in the nursery schools with half-day sessions varied from morning to afternoon depending on the demand. For example, at one of the nursery schools the teacher taught 11 under-fives in the three to four age group in the morning and eight in the afternoon. The primary schools with mixed groupings were all in the rural districts. The average number of under-fives in the four schools with mixed groupings was 25, with the highest in one of the classes being 31 at one school and the lowest that of 16 at another. The average number of under-fives in the 14 schools with the three to four age group was 24, with 37 and 19 under-fives the highest and lowest number of under-fives. The average number of under-fives in the three schools in the four to five age group was 26 with 33 the highest in one class and 22 the lowest at another school. Table 7 gives an overall summary of the class sizes for the schools.
Table 7

The number of under-fives at the three types of schools according to age groups.

<table>
<thead>
<tr>
<th>Types of classes by schools</th>
<th>Number of under-fives by age and school</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td>of schools</td>
</tr>
<tr>
<td>Nursery schools</td>
<td>4</td>
</tr>
<tr>
<td>Nursery classes in primary schools</td>
<td>15</td>
</tr>
<tr>
<td>Nursery classes in Infant schools</td>
<td>2</td>
</tr>
</tbody>
</table>

Background information about the teachers

**Gender**

All the teachers in the study were females. The local informant explained that this was because the majority of teachers in the early childhood education department (3-7) in Barbados were females. The male teachers were usually assigned to the older age groups. Despite the effort made to secure males in the study this was not possible since the males at each of the schools visited were teaching the children older than those specified in the study. This is a representative sample of the vast majority of female teachers whose teach under-fives in schools in Barbados.
Age range

Table 8 gives the breakdown of the age range of the teachers participating in the study by the schools at which they taught. The table shows that the teachers in the study range in age from 20+ to 50+ years. The four teachers in the nursery schools and two in the infant schools ranged in the 30-39 and 40-49 age groups. Teachers in the primary schools with under-fives ranged across all the age groups. The majority of the teachers in the study were in the 30-39 and 40-49 age groups.

Table 8

<table>
<thead>
<tr>
<th>Schools</th>
<th>Age groups</th>
<th>20-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery schools</td>
<td></td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Primary schools with under-fives</td>
<td></td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Infant schools with under-fives</td>
<td></td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1</td>
<td>8</td>
<td>11</td>
<td>1</td>
<td>21</td>
</tr>
</tbody>
</table>

Training and qualifications

The basic qualification for entering the teaching service at the time of the study was four ordinary level certificates. The local informant explained that successful persons applying for positions as temporary teachers in the teaching service were assigned to primary schools. Once they were in the
teaching service, as untrained temporary teachers they could apply to the local teachers' training college. If successful, the teachers entered the local training college to begin the two-year full time course enabling them to become qualified primary school teachers. Nineteen of the teachers participating in the study had completed this two-year primary school training course. Of the two not trained locally, one was untrained, waiting for the opportunity to enter the local college, while the other did her training in early childhood education overseas. Sixteen of the nineteen teachers who were trained in primary education had also received training in early childhood education, having completed an additional six weeks, or one year or two-year training course in early childhood education at the local teachers' college.

In the first year of local training in ECE for primary level trained teachers, they completed a two-year full time course. Two of the teachers in the study completed this course. The courses following were reduced to one year and a one-day release programme. This meant that teachers went to the local college once a week while for the other four days they taught on a regular basis. Thirteen teachers in the study completed this course. These teachers all received an advance certificate or diploma in early childhood education. One teacher completed a one-week Easter vacation course in early childhood education.

Two of the nineteen teachers who were trained locally in primary education had not received specific training in early childhood education. Six of the teachers had acquired the Associate of the College of Preceptors (ACP) and Licentiate of the College of Preceptors (LCP) degrees from an overseas
university. One teacher had a Bachelor of Arts (BA) degree from the local university and two teachers were in the process of acquiring similar degrees. Two teachers had acquired Bachelor of Science (BSc) degrees in early childhood education and elementary education from overseas universities.

Table 9 gives a break down of the teachers by qualifications and the schools.

Table 9

An overview of teachers by qualifications/training and types of schools

<table>
<thead>
<tr>
<th>Types of training &amp; qualifications</th>
<th>Types of schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nursery schools</td>
</tr>
<tr>
<td>Teachers' Primary certificate</td>
<td>3</td>
</tr>
<tr>
<td>Cert. Or Dip. ECE</td>
<td>3</td>
</tr>
<tr>
<td>Degrees: BA, BSc, ACP, LCP</td>
<td>0</td>
</tr>
<tr>
<td>Degree- ECE (overseas)</td>
<td>1</td>
</tr>
</tbody>
</table>

Teaching experiences

The teachers indicated a range of five to over thirty years teaching experiences, but not all their experience were spent with under-fives. All the teachers had taught an older age group, seven had taught the 10-11 age group. Three of these teachers indicated that they had moved directly from teaching
the 10-11 age group to under-fives. The teachers in the 40-49 and 50+ age group had the longest teaching experience having taught for over twenty years. One teacher in the 30-39 age group noted that she had been teaching for just over twenty years after starting her career at the age 18. The majority of them in this age group had been teaching for ten to twenty years. The youngest respondent in the study was untrained but indicated that she had taught at over ten different schools and age groups for over five years. The oldest teacher in the study noted that her teaching was just over thirty years. Table 10 gives a summary of the teaching experiences of the teachers in terms of the schools.

Table 10
Teaching experiences of the teachers by years of service and types of schools

<table>
<thead>
<tr>
<th>Types of schools</th>
<th>Years of service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5-10</td>
</tr>
<tr>
<td>Nursery schools</td>
<td></td>
</tr>
<tr>
<td>Primary schools with nursery classes</td>
<td>1</td>
</tr>
<tr>
<td>Infant schools with nursery classes</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
</tr>
</tbody>
</table>

The number of years in teaching indicates to some extent the variety of experiences the teachers have accumulated over the years. The local informant explained that teaching experiences and qualifications provided the teachers
with the opportunity to apply for further training in the teaching service. As a result the longer serving qualified teachers were given the opportunity to apply for training courses in specialized areas offered as well as permanent appointments to the teaching service. Younger teachers with less experiences and no teacher-training qualifications would have to wait their turn for primary and specialized training. The experiences gained would also be reflected in the number of schools and the various levels at which they taught.

One respondent in the position of an untrained, temporary teacher noted that because she was on contract service, it resulted in her being sent to ten different schools in just over five years of teaching. Most of the teachers indicated that they taught at one or two schools but had been at their present school for more than ten years. They noted that their long stay at their present schools stemmed from the time of their permanent appointment to the teaching service. Two of the teachers interviewed were recently transferred to their present locations from schools where they had taught for over twenty years.

Summary of the sections

The first section detailed the demographic information about the contexts in which the teachers construed their personal practical knowledge about practices used in the education of under-fives. It described the types and locations of the schools, the settings, age ranges of under-fives and class sizes.

The second section detailed background information about the teachers and the schools at which they taught. Data were collected via a survey and clarified by the teachers and a local informant. The areas covered included the issues of gender, ages, training, qualifications and teaching experiences of the
teachers. Demographic information included the types and locations of the schools, the age ranges of under-fives and the class sizes as well as the contexts and time schedules at the different types of schools. The data showed that the majority of the teachers were in the 30-49 age group and were teaching between 10 to over twenty years. The teachers taught under-fives in the 3-4 or 4-5 age groups or mixed groups of children resulting in a 3-5 age group. They taught at nursery, primary or infant schools that were located in the rural or city districts. Most of the teachers were trained in primary education and had acquired local training in early childhood education. Two of the teachers had degrees in early childhood education from overseas institutions.

Conclusion to the chapter

This chapter described the data gathered from the survey completed by the teachers at the end of each repertory grid interview. Issues related to the demographic and background information about the contexts and the teachers were examined. The next chapter begins the presentation of data from the Repertory Grid interviews conducted with the twenty-one early childhood teachers in Barbados.
CHAPTER SIX

Results From Analysis of Repertory Grids

Introduction

Repertory grid technique, explained in Chapter Four, elicited the teachers' constructs regarding practices or elements. In this technique the teachers used their elicited constructs to rate on a scale of 1-5, the supplied elements, which in this study were 17 advocated pedagogic practices. This chapter presents the constructs elicited from the teachers and how these relate to the supplied elements.

Constructs were elicited using an informal discussion, as described in Chapter Four. In the teachers' rating of each element on each construct, a rating of 4 or 5 indicated that the right pole of a construct tended to describe the element concerned. A rating of 1 or 2 showed that it referred more to the construct on the left-hand pole, and a rating of 3 suggest a balance between the two poles. In the following explanation, italics are use to identify both elements and elicited constructs.

To maintain confidentiality and anonymity each teacher is identified by a pseudonym. Data such as age, teaching experiences, training, location of schools and qualifications are reported in a general way so as not to reveal the identity of the teachers, and to make comparisons with other teachers in the sample.

Results from this chapter allowed the following question to be answered in part:
- What are the teachers' elicited constructs and what do they imply about the advocated pedagogic practices used with under-fives in their teaching contexts?

**Presentation of findings**

Data were analysed from each individual repertory grid. Two examples of the repertory grids and how these were rated and how they can be read are first presented. These repertory grids were chosen at random. The other grids are presented in Appendix H in the sequence in which the interviews took place. Then an overview of all grids that include demographic information about the schools and background information on each teacher are presented, thereby linking individualistic contexts to the practices, and adding rich descriptions to the data.

All the constructs from all the teachers, grouped in terms of suggested similarities, are presented as groups based on the meanings ascribed to them by the researcher. A composite analysis of these constructs elicited from the teachers and presented in the repertory grids is next presented. The process of identifying themes is explained using pertinent examples from all of the repertory grid of the 21 teachers. The chapter concludes with a review of the findings presented in the chapter and an introduction to the next chapter.

**Analysis of the repertory grids**

All the repertory grids were first examined, without using statistical methods, to determine the constructs the teachers used in their initial construing of the pedagogic practices presented as elements. Two grids, Mary and Joan are presented as examples of the use of grid ratings.
Mary’s repertory grid analysis

The repertory grid display in Figure 6 indicates that nine constructs were elicited from Mary, a trained primary level teacher in the 40-49 age group. Mary had been teaching for over twenty years and taught the under-fives in the 3-4 age group at one of the city/urban nursery schools. She also completed a one-year certificate course in ECE.

Ratings on the repertory grids give insights into how the teachers applied their elicited constructs to the supplied elements. For example in Figure 6, the practices or elements Child Initiated, Teacher Directed, Integrated Approach, Child Centred, Informal, Free Choice, Individually, Small Groups, Real Life Objects, and Concrete, as indicated by the use of a '1', are rated by Mary as Very Important. Separate Subject and Abstract Materials as indicated by the use of a '5', are rated as Secondary, which is the opposite pole of the construct, Very Important.
Figure 6: Mary's repertoire grid showing the ratings of the supplied elements on elicited constructs
Joan's repertory grid analysis

Joan, a teacher in the 30-39 age group who taught the 3-4 age group at a city nursery school, was not trained in Barbados. She completed a BA degree in Early Childhood Education at an overseas university. Her repertory grid (Figure 7) shows the fourteen constructs elicited.

The elements Child Initiated, Child Centred, Informal, and Free Choice, as indicated by '1', are rated as Free Choice. The elements Teacher Directed, Academic Focus, and Structured, as indicated by '5', are rated as Teacher Directed/initiated. Those rated with a '3', for example Individually, Small Groups, Whole Group, suggest no clear association with either the constructs Free Choice or Teacher Directed/initiated.

The ratings are not used in the rest of the chapter, just the construct labels. However, they are explained here as they help clarify the examples presented. Ratings are used in the analysis and results presented in Chapter Seven and in the discussion in Chapter Nine.
<table>
<thead>
<tr>
<th>Constructs</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free choice</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The same thing</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Focuses on the child</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Teacher presenting</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Teacher controls</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Methods of teaching in e.c.</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>We give it to the children</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>More involving way of teaching</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Fresh</td>
<td>10</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Help to understand the child</td>
<td>11</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Take you anywhere/how</td>
<td>12</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Less routine\meandering</td>
<td>13</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>On its own</td>
<td>14</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

- **Figure 7**: Joan's repertory grid showing the ratings of the supplied elements on elicited constructs.
Process of grouping the elicited constructs

As a means of answering the question posed at the beginning of this chapter, constructs were grouped in themes derived from the constructs. Table 11 gives the number of constructs elicited from each of the 21 teachers in the study. An analysis of the elicited constructs derived from each teacher's repertory grid in the two examples and in Appendix H is now presented.

Table 11
Number of constructs elicited from 21 teachers using a repertory grid technique.

<table>
<thead>
<tr>
<th>Names of teachers</th>
<th>Number of constructs (N=358)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingrid</td>
<td>27</td>
</tr>
<tr>
<td>Sonia</td>
<td>27</td>
</tr>
<tr>
<td>Audrey</td>
<td>24</td>
</tr>
<tr>
<td>Diana</td>
<td>23</td>
</tr>
<tr>
<td>Mertie</td>
<td>21</td>
</tr>
<tr>
<td>Monica</td>
<td>20</td>
</tr>
<tr>
<td>Wendy</td>
<td>20</td>
</tr>
<tr>
<td>Angela</td>
<td>19</td>
</tr>
<tr>
<td>Lucille</td>
<td>19</td>
</tr>
<tr>
<td>Deborah</td>
<td>18</td>
</tr>
<tr>
<td>Veronica</td>
<td>17</td>
</tr>
<tr>
<td>Ruby</td>
<td>17</td>
</tr>
<tr>
<td>Gloria</td>
<td>16</td>
</tr>
<tr>
<td>Iris</td>
<td>15</td>
</tr>
<tr>
<td>Joan</td>
<td>14</td>
</tr>
<tr>
<td>Carmen</td>
<td>13</td>
</tr>
<tr>
<td>Sheila</td>
<td>10</td>
</tr>
<tr>
<td>Maureen</td>
<td>10</td>
</tr>
<tr>
<td>Brenda</td>
<td>10</td>
</tr>
<tr>
<td>Mary</td>
<td>9</td>
</tr>
<tr>
<td>Doreen</td>
<td>9</td>
</tr>
</tbody>
</table>

The three hundred and fifty-eight constructs elicited from the 21 teachers provided insights into the teachers' reactions to the seventeen supplied elements or practices. A composite picture of the elicited constructs
allows the identification of emerging categories, groups or themes that provide the basis for the presentation of the teachers' knowledge about the practices and for analysis of depth interviews. The development of these themes is now explained.

The researcher assigned meaning to left-hand labels of each pair of elicited constructs from each repertory grid and grouped them accordingly. For example, the left hand pole of Mary’s constructs (Figure 3) are *Very Important, Working Together, Formal Work, Not Free to move, Provides opportunity, Recommended, Advocated, Flexible* and *Has its Place*. The label or heading assigned to each construct group is therefore a reflection of the meaning assigned to it by the researcher, and allowed the development of a significant construct group or theme. The constructs placed into each category reflected both the individuality and the similarities in the teachers' construing of the practices.

An example of this process is now presented using Mary. Mary’s constructs in the first left-hand pole like above, were grouped together and labeled 'Classroom experiences'.

Joan’s constructs in Figure 5 were treated similarly. Constructs *Flexible/Rigid, More interesting way of teaching/Boring, Fresh/More rigid, Take you anywhere or anyhow/Rigid, Less routine or meandering/Rigid* were grouped under 'Classroom experiences'. Joan’s constructs *Focuses on the child/Not thinking of the child’s needs, Helps to understand the child/Have no care of the child’s needs* were grouped under the label 'Consideration of the under-fives'. Constructs *Teacher presenting/Taking from the child, Teacher*
controls/Child controlling. We give it to the children/Drawing from the child were grouped under the label 'Teacher versus child dominance'.

Examples of other grouping and labels from other teachers, developed by the researcher included the following. Constructs suggesting a view of the practices in terms of a 'Traditional academic focus, for example Iris's Old method/Something new, Gearing for 11+/Focuses on living with others (Appendix H, Grid 1) were grouped together. Constructs that seemed to convey 'Benefits to the under-fives', for example Angela's Focuses on the child/Focuses on academics, Child is comfortable/Child is uncomfortable, Child feels secure/Child is insecure, (Appendix H, Grid 2) were grouped together.

All constructs from all the other 19 repertory grids were similarly grouped under various conceptual categories. As a result of this grouping process five main groups were identified. The number of constructs in each construct group is detailed in Table 12 and the constructs in each group are presented in Appendix I.

Table 12

The frequencies of constructs in each construct groups derived from the elicited constructs of the 21 teachers and established by the researcher.

<table>
<thead>
<tr>
<th>Construct groups</th>
<th>Number of constructs in each group (Total N =358)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Classroom experiences</td>
<td>180</td>
</tr>
<tr>
<td>2. Benefits to the under-fives</td>
<td>120</td>
</tr>
<tr>
<td>3. Consideration of the child</td>
<td>29</td>
</tr>
<tr>
<td>4. Teacher's versus child's dominance</td>
<td>22</td>
</tr>
<tr>
<td>5. Traditional academic focus</td>
<td>7</td>
</tr>
</tbody>
</table>
Table 12 shows the number of constructs classified by the researcher in the five construct groups. Constructs grouped under Classroom experiences focused on classroom management and control, the physical conditions, processes and results of implementing the practices and their personal views, beliefs and opinions on the use of the practices. For example More manageable/Chaos, As long as there is space or material/Inadequate space or material, Works well/Does not work well, Very effective/Ineffective, Love/Do not love a whole lot, Believe in/Do not believe in.

The construct grouping, Benefits to the under-fives included constructs that relate to the social, physical, emotional and cognitive development of the child and his or her reactions to the practices. For example Children remember more/Very little is learnt, All round development/Limited development, For socializing/Shows indiscipline, Child feels secure/Child is insecure, Child enjoys/Child does not enjoy.

The 29 constructs in the grouping, Consideration of the child related to the suitability of the practices in terms of the readiness, and maturity of the child. Examples of the constructs grouped in this category include Take child into consideration/Does not consider child, Focuses on the child/Focuses on the academics, Concentrated on the child/Concentrated on ability.

The 22 constructs in the grouping, Teacher’s versus child’s dominance related to their roles in the classroom, their decisions, ideas, presentations and control in terms of the teacher or the child. For example Children Choose/Telling them what to do, Children do what they like/Dictating what children do, Children learn from each other/Children learn from the teacher.
The constructs grouped under *Traditional academic focus* concentrated on the exposure to new knowledge and the traditional methods used, preparation for formal school and the examination taken at the end of primary education and the long-term role of education. For example *Old time method/Something new, Gearing for 11+/Focusing on living with others, and Prepares for formal school/Prepares for life*.

**Constructs and implications about the practices**

The findings presented in this chapter begin to answer the research question:

"What are the teachers’ elicited constructs and what do they imply about the elicited pedagogic practices used in the education of under-fives in their teaching contexts?" posed at the start of this chapter. The findings from the repertory grids suggested that the constructs elicited from the 21 teachers focused on five main categories or themes. These included: *Consideration of the child, Benefits to the under-fives, Classroom experiences, Traditional academic focus, and Teachers versus child dominance*. These categories suggested that the teachers construed the practices from a variety of perspectives, implying the teachers' eclectic view of the practices.

The constructs also implied the individuality and similarities in the teachers' construing of the practices as suggested from the wide range of constructs classified under the five categories. As a result the constructs and the repertory grid through which they were derived, provided a unique basis for organising and further unpacking the teachers' construing of the practices.
Their views based on their constructs will be further explored, and the research question further addressed, in Chapters Seven and Eight.

Summary

This chapter presented an analysis of the teachers' elicited constructs. After presenting two examples of grids, a composite view of the teachers' construing of the supplied practices was achieved by the grouping of the constructs. The five construct groups emerging from the data implied the individuality and similarities in the teachers' construing of the practices. These five groups, to be used as themes, suggested major areas for the analysis of the practices. These included Classroom experiences, Consideration of the child, Benefits to the under-fives, Traditional academic focus, and Teacher versus child domination. Examples of the ways the constructs were grouped under each theme were given. Details of the groupings of all the constructs are presented in Appendix G. The final section answered the research question posed at the start of the chapter, giving examples of the constructs and the implication of these for the practices.

Conclusion

The five construct groups and their associations with the 17 supplied elements or practices need to be developed to further uncover the personal practical knowledge about the practices used with under-fives. In the next two chapters these five groups provide the overall themes in the further presentation of the personal practical knowledge of the teachers. The construing of the elements or practices and the classifications with in the five construct groups or themes will be further developed in Chapter Seven.
CHAPTER SEVEN

Results from the Principal Components Analysis

Introduction

This chapter presents the results of the principal components analysis, based on the teachers' consideration of the advocated pedagogic practices. This process reveals elements and the associations between them and the constructs elicited during the grid interviews. It gives an understanding of the meanings ascribed to and the associations between the teachers' elicited constructs and pedagogic practices or elements. These elements were Child Initiated, Teacher Directed, Integrated Approach, Separate Subjects, Academic Focus, Child Centred, Informal, Free Choice, Parent Involvement, Individually, Small Groups, Whole Group, Abstract Material, Real Life - Objects, Concrete, Formal, and Structured. The meanings attached to the elements or practices set the foundation for the development of an understanding about the teachers' personal practical knowledge about them.

Even though the ratings on the grids revealed a great deal of information about individual associations, the principal components maps were better indicators of the implications and associations between constructs and elements. Principal components analysis provided details of the way the practices were or were not associated with the elements or practices, and the implications of these associations. In this chapter, two examples of analysis of the principal component maps are presented to allow the reader to understand how main groupings and interrelationship between the teachers’ elements and constructs were derived. The analysis of the other teachers' principal
components maps is presented in Appendix H. On each principal components maps the constructs are represented by dots (.) and the elements with crosses (x).

Presentation of findings

This chapter is divided into two sections. The first section helps to answer the research question "What are the associations and implications between the constructs and the pedagogic practices used in the education of under-fives?" It presents two examples of principal components maps and how they were analysed, using the same teachers, Mary and Joan, from Chapter Six. The principal components maps for the other teachers are presented in Appendix H. For each components map the researcher placed lines around clusters of elements and constructs, which seemed to form groups and then numbered each group to help with interpretation. The lines however do not indicate any fixed boundary. It is therefore not all that important where the boundary is, since the groups identified were used to enter into, and facilitate depth interviews or conversations with the respondents. This unique feature of the repertory grid provided the researcher with the opportunity to use the teachers' own individual constructs or language as a basis for conducting the depth interviews, and to directly deal with teachers' own ideas. Table 13 details the number of constructs from all respondents, associated with the elements or practices presented above. Examining and recording the constructs closely associated with elements or practices on the principal component maps and recording these achieved a composite analysis of the
principal component maps. This presentation provides an overall view of the
number of constructs associated with each practice.

The second section presents data to answer the second research
question "How do the teachers construe the meanings of the advocated
pedagogic practices used in the education of the under-fives?" The chapter
closes with a conclusion to the findings presented.

Mary's principal components analysis

The percentage of variance for the first two components displayed on
Mary's principal component map in Figure 5 is 88% and the third component
accounts for a further 7%. Therefore elements and constructs are close
together in the two dimensions mapped in Figure 5.

In the first group the element Separate Subject is near to constructs
Discarded, Activity oriented, Individual, Secondary, Not meaningful,
Meaningless and Not advocated. Element Abstract Material is also near to
this group of constructs. In group two the elements Structured, Whole Group,
Formal and Parent Involvement are closely associated and form a group near
to the centre implying that they are not highly loaded on either factor and may
be relatively unimportant in Mary's construing.

In the third group the elements Academic Focus and Teacher Directed
are closely associated with Not free to move and Flexible. In group four the
construct Free to move appears to be closely associated with the elements
Individually, Free Choice, Informal, Child Centred, Concrete, Real life
Objects and Integrated Approach. In group 5 elements Small Groups and
Child Initiated are closely associated with Advocated, Very important,
Recommended, Formal work, Has its place, Provides opportunity and Working together. The clustering of these elements and constructs suggest they are closely associated in Mary’s construing.

Figure 5: Mary’s principal components analysis of supplied elements rated on elicited constructs

Joan’s principal components analysis

The principal components analysis in Figure 6 revealed the main groupings between constructs and elements in Joan’s repertory grid. The first two components account for 87% of the variance while the third component accounts for a further 6%, suggesting close associations on the dimensions mapped in Figure 6. In grouping one, close associations include Child Centred, Child Initiated, Individually, and Free Choice with Child controlling, Fresh, More interesting way of teaching, Take you anywhere/anyhow,
Flexible, Focuses on the child, and Taking from the child. Group two shows elements Informal, Whole Groups and Small Groups closely associated to Drawing from the child, and Helps to understand the child.

In group three the elements Teacher Directed, Real Life Objects, Integrated Approach, Parent Involvement and Concrete are near to the construct Have no care of child’s interest, We give it to the children. In group 4 the elements Formal, Academic Focus, Structured and Separate Subject are associated with More rigid, Teacher controls, Boring, Rigid, Teacher presenting, Teacher directed/initiated, Not thinking of the child’s needs and The same thing. The construct Rigid was used as the pole of a construct on three occasions indicating its importance.

Elements Concrete, Whole Groups and Small Groups may be regarded as relatively unimportant in Joan’s construing of the practices, being not relatively highly loaded on either component. Elements Abstract Material and Teacher Directed are relatively important elements to Joan as are the constructs On its own, Grouped with something else, Variety, Less routine/meandering.
Figure 6: Joan’s principal components analysis of supplied elements rated on elicited constructs

All other principal component maps were similarly analysed and presented in Appendix H. Table 13 presents a composite picture of the number of constructs associated with the elements or practices for all teachers. The numbers were as a result of identifying, recording and tallying the constructs close to, or near each element on the principal component maps seen in the two examples in this chapter and in Appendix H. These figures give a broad indication of the overall number of associations between the constructs as grouped under the themes or construct groups and the elements or practices.

For example the element *Whole Group* seemed to be associated with the largest number of constructs as opposed to *Parent Involvement* which had the least number, with the other practices falling between these two extremes.
Table 13

An overview of the number of elicited constructs associated with the supplied elements for all the teachers derived from the principal component maps

<table>
<thead>
<tr>
<th>Elements</th>
<th>Number of constructs (N=358)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Group</td>
<td>106</td>
</tr>
<tr>
<td>Child Centred</td>
<td>89</td>
</tr>
<tr>
<td>Formal</td>
<td>89</td>
</tr>
<tr>
<td>Individually</td>
<td>82</td>
</tr>
<tr>
<td>Separate Subjects</td>
<td>81</td>
</tr>
<tr>
<td>Integrated</td>
<td>78</td>
</tr>
<tr>
<td>Small Groups</td>
<td>76</td>
</tr>
<tr>
<td>Informal</td>
<td>75</td>
</tr>
<tr>
<td>Free Choice</td>
<td>74</td>
</tr>
<tr>
<td>Teacher Directed</td>
<td>74</td>
</tr>
<tr>
<td>Academic Focus</td>
<td>73</td>
</tr>
<tr>
<td>Real Life Objects</td>
<td>68</td>
</tr>
<tr>
<td>Concrete</td>
<td>65</td>
</tr>
<tr>
<td>Child Initiated</td>
<td>62</td>
</tr>
<tr>
<td>Abstract Material</td>
<td>62</td>
</tr>
<tr>
<td>Structured</td>
<td>61</td>
</tr>
<tr>
<td>Parent Involvement</td>
<td>37</td>
</tr>
</tbody>
</table>

Associations and implications between the constructs and pedagogic practices

For 10 of the 21 teachers the constructs and elements were associated in two main clusters or groups on the principal components maps. The principal component maps suggested that practices such as Child Initiated, Integrated Approach, Academic, Child Centred, Informal, Parent Involvement, Informal, Free Choice, Small Group, Real Life Objects, Concrete, Integrated Approach and Individually were closely associated with constructs that suggest a focus on the child, Get it out of the child, Children relate to, Child finds out, Brings out skills of child, More effective for slow learners and Caters to all round development. On the other hand the principal component maps suggested that they closely associated practices Whole Groups, Teacher Directed, Parent Involvement, Abstract Materials, Separate Subjects, Formal,
Academic Focus, Structured with constructs that inferred a focus on the cognitive development, such as No freedom of expression, Restricting, Stunts creativity, Rigid/formal, Telling them what to do, Choose a topic randomly, Forces down child's throat, In scheme books, Old time method of the child.

The other 11 teachers' principal components maps showed many more groupings on the left and right of the principal components maps suggesting variations in the grouping and associations of the constructs and elements. For some of the 11 teachers, practices such as Separate Subjects, Teacher Directed, Whole Groups, Abstract Materials, Small Groups, Parent Involvement were closely or loosely associated with either main groupings, or fluctuated between and among the clusters or groups on the principal components maps. For a few teachers, practices such as Structured, Parent Involvement and Academic Focus were close to the centre suggesting they were relatively unimportant in the teachers' construing. However these teachers' associations of the construct and elements suggested that they too construed the practices in terms of those that focus on the child as opposed to those that focused mainly on the cognitive development of the child. For example Concrete Real Life Objects were associated with Children enjoy, Has lasting impressions, Provides opportunities, Child's interest is there, while Separate Subject, Formal and Whole Groups were close to Interest not there, Dictating what children do, Gearing for 11+ and Fails to pick up strength/weaknesses.

These associations implied, as did the constructs, the individualities and similarities in the teachers' construing of the practices. The associations
also implied that the teachers construed the practices from principles of pedagogy derived from theoretical and or culturally empirical perspectives. These two implications are further explored in Chapter Eight.

These findings help to answer the research question, namely "What are the associations and implications between the constructs and the pedagogic practices used in the education of under-fives?" posed at the beginning of this chapter. The findings from the principal component analysis seemed to suggest that the constructs were associated with the practices in two ways, those that seem to focus on the total development of the child as oppose to those focussing on cognitive development.

Summary

This analysis showed the associations between the constructs and elements or practices on each of the teachers' principal components map. Two examples of how the principal component maps were analysed were presented. A composite picture of the number of constructs associated with the elements or practices for all the teachers was next presented. The analysis of the associations between the grouped constructs and elements presented on the principal components maps suggested that the elements or practices were associated with the constructs in two main ways. These were: those practices focussing on the total development of the under-fives, that is their physical, social, emotional and cognitive development; and or practices focussing solely on the cognitive development of the under-fives. These associations implied, as did the constructs, the individualities and similarities in the teachers' construing of the practices.
Although groupings of data can give some insights, repertory grid is an individual technique. Consequently, it is important to investigate each individual's construing in depth. Interviews were used as the basis for providing deeper insights into the way that the individual teachers construed the practices. Respondents were given the chance to confirm or deny the associations and to give additional information and greater insight into their personal practical knowledge about the practices.

**Construing the practices**

The following section, which is the main part of the thesis, presents a summary of the way each of the practices or elements was construed by the teachers. During the depth interviews the teachers elaborated on their construing of the elements or practices displayed on the principal component maps. Each of these elements, referred to as practices throughout the remainder of the study, is now discussed in the sequence shown on the repertory grids. The teachers' construing of the various practices provided a foundation for eliciting their personal practical knowledge during the depth interviews. Each teacher's description or explanation of a particular practice was coded according to the particular practice discussed and grouped along with those from all other teachers. A generalised report of teachers' construing of each practice is given, and supported by verbatim examples.

This insight into the construing of each element helps to answer the research question "How do the teachers construe the meanings of the advocated practices used in the education of the under-fives?" It also lays the
foundation for eliciting, coding and understanding the teachers' knowledge about these practices, presented in Chapter Eight.

Constructing a Child Initiated approach

All twenty-one teachers construed Child Initiated as a practice that provided the under-fives with the opportunity to initiate a discussion, activity or idea in the classroom situation. For example Joan from a nursery school explained it this way “It came from them and we worked from there”. Mary from a nursery school explained the view shared by the teachers:

There are times when you allow the child to, like guide you even though you might have a focus at the back of your mind as to what you want to do or what you want to put over. There are times when you have to change and go in a completely different direction because they come up with something else and you may need to go around and get around this thing that they come up with and there are times when they ask so many questions.

Two of the twenty-one teachers also construed the practice in terms of the freedom granted the child in the classroom. Monica from a nursery school in a primary setting noted that “With child initiation the children do what they think naturally, they have different interests and they pursue these without the teachers there telling them what to do”. Wendy said “The child is able to express himself without having restrictions and act in a way, the way he feels so far as expressing his own feelings go”.

All twenty-one teachers seemed to have construed Child Initiated approach as a practice classified by the researcher, as one that focused on the child and aided in his or her total development. The teachers generally construed a Child Initiated approach as allowing input from the child, in terms of initiating action or ideas in the classroom.
Construing an *Integrated* approach

All 21 teachers shared similar meaning to the practice *Integrated* approach. Their views can be summed in Deborah’s comment about the practice:

When I think about the *Integrated* approach to teaching, I think in terms of a correlation between the subject areas which are presented in the syllabus. I think in terms of a correlating these subjects so that there is a bond between them. So instead of subjects being presented separately, the children can see the connection between all of them.

Ruby gave a typical example of their views when she said, “When you start using the *Integrated* approach everything seems to tie in”. Wendy from a nursery class in a primary school gave an example of the *Integrated* approach, a view shared by the other teachers. She said:

If we are doing a particular project, just suppose we say trees around our school or whatever. And in Mathematics we can count leaves or fruits, in Science we can talk about the plant and how it grows and we can have little songs about trees or fruit or whatever. In Social Studies we talk about how we can sell fruit and how people get money by selling fruit. And in health we talk about how fresh fruit are good for you and things like that.

Maureen from a nursery class in a primary school gave this example that further illustrates the construing of the practice by the teachers.

Let’s say for example that the children are looking at “The School.” You can have Language Arts coming out when you have your discussions about the school. The language comes out through the children. You can get them to use words in connection with their school. You can have health lessons where the children talk about the bathrooms and general cleanliness. You have health lessons where the children might draw little pictures of trees around the school. The children can count each other, they can count the chairs in the classroom, and they can count their bags at school.

Iris’ construing of an *Integrated* approach also reflected the common view expressed by the teachers:
You try to correlate the subjects, say you take a particular topic like 'Pets' or 'The Market' or 'Transport' or something like that. And we try to teach or centre the other subjects around that particular topic. For example, from The Market you can get language development... Spelling, Poetry, Science, Social Studies, also Mathematics. In the market you can count the animals, the sizes of the animals and 'how many feet does that animal have?' and that sort of thing. And texture can also come in there. Then you can do the religious aspects coming too because even teaching a topic like 'The Market' you can get bible stories. You can sing songs about the market, singing comes in. You can beat rhythm and such like in a particular topic.

Diana’s construing of the Integrated approach also summarised the other teachers’ construing of the practice. She construed an Integrated approach as “planning and having a theme and having everything built around it where they overlap”. Angela construing of an Integrated approach explained the integration within subjects. She said:

I find that sometimes we start to teach, ok, you start, you say ‘we are going to do number this morning’ and although you are going to look at a particular number, say number four, and you are using Concrete materials and you have colours, language comes in there.... You get grouping, you also get shapes coming out and you might even get concepts like next to, before or in the middle, or at the end.

The general consensus among the 21 teachers was that an Integrated approach focused on the all-round development of the child and involved focussing all the subjects around one topic or theme. They construed the practice as referring to or had a similar meaning to, a project in which a topic was selected and all the subject areas focused around this particular topic

Construing a Child Centred approach

Child Centred was construed by eleven of the teachers as focussing teaching and learning on the child and his or her involvement in the classroom.

For example Audrey described Child Centred as having a classroom “where
the child is involved very much in its learning, where the teacher would have to provide concrete material, set up the learning centres for the child to use”.

Mary’s description of the practice reflected the views shared by these teachers. She explained:

The child is the centre of your focus and you keep the child in mind at all times. And your activities are planned and geared towards the child, toward the individual, towards each child feeling confident building each child’s self esteem and self concept and eventually promoting the all round development in each child.

Iris, like the other teachers, noted that when the focus was on the child, then everything that happened in the classroom was geared to meet the needs of the child.

Ten of the twenty-one teachers shared similar views but construed the practice further in terms of the development and needs of the child and his or her enjoyment. Maureen argued that the practice should centre on the child and be “based on the teacher’s awareness of the needs of those children”.

Sonia, like the other ten teachers, said she felt that the practice allowed the teacher to discover the “interest, likes and dislikes of the under-fives, and plan the activities so that the children can enjoy them”. Veronica, like ten of the twenty-one teachers described the practice as one in which the children “should be free to express their thoughts, what they feel, and how they feel”. These teachers felt that in a Child Centred environment the teacher could begin to concentrate on the children. Diana noted that the practice was that which allowed the teacher to “think of the child, what we want from the child, the things the child should do, things to build the child’s self-confidence”. Ruby said that the approach involved using “whatever experiences would make it
interesting for the child”. Mertie noted that Child Centred provided “the child with the opportunity to be able to concentrate and do what he or she enjoys doing” while at the same time allowing the under-fives to “discover things for themselves”.

The general consensus among the teachers was that Child Centred focused on the child, his or her development and needs. All of the teachers seemed to have construed the element Child Centred as a practice that was classified by the researcher as one that focused on the child as opposed to a teacher-oriented stance. The teachers related the practice to the overall classroom atmosphere where the under-fives were involved in their own learning and allowed to make choices and initiate activities.

Construing an Informal approach

Fifteen of the teachers associated this practice with a classroom setting where formality was removed. They described the classroom as having fewer tables and chairs, freedom of movement and the opportunity for the under-fives to move freely and manipulate the activities. For example, Iris described the classroom:

The classroom itself should be so designed that it lends to the child’s learning.... Materials use to help the child to learn should be arranged that the child can get to them easily. The child should be able to get to these corners easily.

Diana construed how she operated in such a setting. “Sometimes I come in and I get something and we sit down on the floor and we do a nice story telling in a lovely comfortable setting”. The other teachers’ construed a similar setting,
free of chairs and tables and providing opportunities for the children to sit on a carpet and work.

While also acknowledging the environment as a determining factor in what they considered an *Informal* approach, Audrey, like seven others, described the approach in terms of the discussion that took place in and outside of the classroom. She explained:

Sometimes the child might bring something into the classroom, it might be a toy, it might be something it found and that is where *Informal* discussion comes in. The child should not be ignored but the teacher should take the opportunity to discuss with the child and the other children what was brought to the classroom. Sessions such as show and tell or reading stories from books that the children have brought to school, or playing a tape with songs that they have brought. Even the weather for the day may cause the teacher to deviate a bit from her normal planning. Sometimes it might be rainy so you have to take them outside and discuss with them what happens when it rains. There might be some environmental noise around, you might just have to stop whatever you are doing and go outside to investigate.

Deborah, like the other twenty teachers, construed the practice as 'flexible' and changing to meet the need of the child. Sonia construed it in terms of the incidental teaching that occurred in the nursery and she described an *Informal* approach as it related to the discussion-taking place in the lesson. She said:

There are times when a teacher plans to teach a particular number, e.g. four. We may be counting four apples or blocks and some creature may pass near the class. They may draw the teacher's attention to the creature. It is at this point that the teacher may decide to question the students, e.g. How many legs does it have? The conversation may involve other creatures with two legs or more. Therefore the teacher in nursery may have a daily plan but we do not adhere to the plan. We make our programme flexible to accommodate incidental teaching.

Lucille shared a similar insight into the way that an *Informal* approach worked in her classroom.
A child might bring something into school or might have something interesting that might have happened at home. They stop you in the middle of the lesson. If this is of interest to the child then by all means. The lesson that you have planned could probably stay aside and you get right into what makes them happy.

These teachers' views reflected Deborah construing of the practice as that in which learning is tied together.

Ten teachers agreed that the under-fives' Informal interactions with each other and the teacher was a sign of an Informal approach to teaching. The general consensus among these teachers was that these Informal discussion sessions were an important part of an Informal approach to teaching. These teachers also agreed that an Informal approach for the under-fives focused on a freer, more relaxed relationship between the teacher and the under-fives and their role and behaviour in the classroom.

It can be concluded that the teachers generally construed the use of an Informal approach in terms of catering to the development of the under-fives. This was reflected in their construing of the practice in terms of the classroom atmosphere, access to materials, the nature of the interaction between the teachers and the child, child and child, the activities and discussions, and roles of the teacher and the under-fives.

**Construing a Free Choice approach**

Nine teachers construed this practice as that which allowed the children, either in-groups or individually, total freedom in the selection of activities from the various learning centres around the classroom. For example Sheila from a rural primary school argued that with Free Choice the under-fives "should be able to make a choice of something they want to do when they
want to do it". She like most of the teachers felt that *Free Choice* was the
opportunity given for free movement and selection of activities. Mertie said “In
some cases the child will have free choices, it will be able to choose activities
that they (sic) are interested in especially in the free play activity session rather
than the teacher choosing”. Gloria described her *Free Choice* approach:

Sometimes for half an hour to forty-five minutes each day I allow them
free time where they can go and pick up any activity that they want to
use and use it however they want to use it without any interference
from me.

Carmen described the under-fives in a complete *Free Choice* session as
moving “around fairly quickly” and the teacher having “a variety of activities
available, e.g. dress up corner, art, puzzles, so that everybody is not confined to
do the same activity”. Doreen described the practice as the movement away
from “teacher telling them ‘well take this or take that’ to the children having
“freedom of choice to select what they want to do”. Wendy from a nursery
school said:

Now the child is free, although it is not going to be a freedom where
they can do absolutely what they like without any bounds at all as far as
direction and what goes. Yet the element of freedom I think, is very
important because the child is able to express himself without having
restrictions and act in the way he feels so far as expressing his own
feelings go.

Mary from a nursery school summed it up as “free activities where the
children move around the classroom and they are free to choose whatever they
want to choose at that point in time”. Maureen from a similar setting
construed *Free Choice* as having “your learning centres in the classroom and
the children are free to go and choose what they are comfortable doing or what
they feel like doing that morning, where the interests lie. They can go and choose what they want to do.

The other twelve teachers stated or implied some measure of control in their *Free Choice* approach. For example the teachers’ construing of the provision of limited choices was reflected in this comment by Ruby who said:

*Free Choices* are never very, very free. *My Free Choice* is free within certain limits. *My Free Choice* is never, ‘I can do what I feel like’ that is not my *Free Choice*. *My Free Choice* is having a number of activities an afternoon and you can do A, B, C, whatever you want within those, you pick the one you want. Or sometimes I would tell them well, ‘make sure you go to two different activities instead of one, do two.

Like this teacher, the other teachers also said they believed that by providing selected activities, they know exactly what each child was doing and they knew if and when the task was completed. For example, Deborah explained her way of providing limited *Free Choice*:

In this session a particular learning centre will be identified for use for that particular lesson. There would be a number of learning activities available in that particular centre and these activities would be targeted from simple to complex to cater to the individual needs of the children.

The other teachers expressed similar construing and further explained that they provided the under-fives with the opportunity for choosing freely as they selected a particular activity from the limited choices available at that time. They argued the need for providing limited choices. Deborah from a nursery setting in an infant school gave an example of this type of *Free Choice* approach, she said: “Although there will be a selection of activities, the children should have a choice of selecting the particular activity which they prefer to work with at anytime”. Ingrid felt “if you leave the child to do just
free activities it may tend to work in one area constantly each day, just go to this one area". She said she felt that children at this age needed guidance and that each child needed to be guided into doing an activity and this was why limited *Free Choice* was used. Audrey from a rural primary school described the practice as the child requesting permission to go to a specific centre to do a particular activity. She explained it this way "It should be set up in such a way that the child could say, ‘May I play with the puzzle? May I use the sand table? May I have water play? Can I draw now? May I paint later?’" Gloria from a nursery in a primary school explained the practice as that in which the under-fives were given limited choices but allowed the freedom to choose in terms of the friends with whom they would like to work.

The teachers generally agreed that teaching *Free Choice* was a child-oriented practice catering to the individual’s total development. They construed a *Free Choice* approach as allowing under-fives complete freedom to choose, or selected and guided choices by the under-fives, as well as making a selection from a limited number of activities in terms of interest or friend with whom they wanted to work.

**Construing a Concrete approach**

All 21 teachers expressed shared similar views about a *Concrete* approach. They described the practice as the provision of objects or materials such as plasticine and building blocks for the under-fives to manipulate by touching. For example Veronica from a rural school described her use of *Concrete* material in the teaching of shapes. She said:
I might be doing shapes, I can find like (bottle) covers. As many covers that maybe in a circle or has a regular shape or whatever. So that they can see and associate the concept with something they can see.

Doreen put it this way “Instead of just talking about certain objects it is very beneficial sometimes to bring objects in the classroom so that the children would be able to touch and feel and manipulate”. Iris from one of the rural schools construed Concrete objects this way, she said:

Here in this classroom in particular you have some seeds, you have some stones and you have some stoppers from drink bottles. And these things the children can touch and handle and arrange and sort. Then we have shapes from different textures, sponge and cardboard and other materials. Then we have blocks of various sizes, texture, we have some wooden blocks, some plastic blocks that they can use and the bottle and these things that the children can use.

These teachers also described materials such as toys, games, books and objects from nature such as rocks, sand and water. For example, Wendy spoke of collecting leaves and fruits from trees around the school in a project called “Trees around us”.

All the teachers construed the term Concrete as child centred and pertaining to materials or objects in classrooms used to support or explain information to the under-fives during a lesson, or freely available in centres of interest. The teachers generally agreed that Concrete Objects were support materials and objects provided for the under-fives to manipulate as they learn.

Construing of teaching Individually

Teaching Individually as construed by all the teachers was summed up in the words of Mertie as:

Important, since each child is an individual learning through different means. And attention therefore should be paid to the learning style of each child. And each child has individual needs as well and these
should be attended to on an individual basis, rather than on a class basis.

Teachers differed, however, on how teaching the child *Individually*, should be implemented. Ten teachers described the practice as selecting individual pupils from their class and working with them as a group. They construed teaching *Individually* as working with weak children within a small remedial group. For example, Mary said of teaching *Individually*, “You have to take an individual by themselves (sic) and help them to follow through steps”. Others talked of walking around the class during a lesson, for example the *Free Choice* approach, and initiating discussions or offering individual guidance or help. Wendy explained the practice his way “To deal with children, the teacher can go to a child and have a talk to her about something”. These teachers described the selection process as that based on observation of the pupils as they work, or their reactions during a whole group or small group session.

The teachers generally construed the element *Individually* as focussing on the child with the teacher working on “a one to one” basis with each individual. The general consensus however was that teaching *Individually* was working with each child in order to strengthen a weak area or cater for his or her interest.

**Construing a Small Groups approach**

All 21 teachers shared similar views about a *Small Groups* approach. They described the practice as that of dividing the children in the class in small groups. For example Angela construed the practice as putting "children in to
groups in order to help the slower child". Ruby said of the practice: "The weak ones, I have to take them out and bring them to me in small groups."

Ten of the teachers further construed the practice in terms of meeting the needs of the under-fives on an individual basis. For example Lucille described the practice as being "on one to one with the children as they work in a small group" where the teacher "finds out about the individual and learn more about the child individually". Carmen also described the practice as that which allowed the teacher to "get more of a one to one". Audrey noted *Small Groups* as putting into groups in order to understand "how each child is developing". The practice was construed as needed for different reasons by the teachers but the process for all the teachers was the same, that is, breaking the large group into smaller groups.

The teachers generally construed *Small Groups* approach as a child centred approach in which teachers divided their large or whole classes or groups into smaller groups according to, or to cater for, either ability or interest of the under-fives.

**Construing Real Life Objects**

All of the teachers shared similar views in their construing of *Real Life Objects* in the education of the under-fives. They noted that while *Concrete* focused on inanimate objects, *Real Life Objects* were about animate resources. They construed the practices as providing the living things for the under-fives like "fish, hen and chicks and eggs and all such things" (Wendy).

Twelve of the teachers suggested from their extended use of the term, that it not only included living things but activities, people and experiences that
were real to the children. These teachers mentioned going on visits or tours to places of interest such as farms, beaches and zoos, taking care of animals and plants in the classroom and inviting resource persons into the classroom such as a nurse or a policeman. For example, Carmen described *Real Life Objects* as related to “mainly in areas such as Social Studies and Science when you are dealing with things like animal life, understanding market life and that kind of thing, where they actually see the thing”

All teachers generally construed the practice *Real Life Objects* as a focus on the child since it provided teaching aids that were real or alive for clarification and experience. They shared the view that *Real Life Objects* was therefore the provision of objects, materials, people and experiences to the under-fives either in or out of the classroom, that were a part of or similar to those actually found and used in real life.

**Construing a Separate Subjects approach**

All the teachers construed *Separate Subjects* as the opposite to an Integrated approach, describing it as teaching one of the subjects and then moving on to another subject and teaching another topic, which was unrelated to the one taught in the previous subject area. They described it as “numbers” are taught in Mathematics, “Movement” in Science, “Reading” in Language Arts and “The Home” in Social Studies to identify a few. For example

Deborah and Monica reflected the other teachers’ description of the practice as they summed up a *Separate Subjects* approach as “teaching subjects in isolation”. Deborah explained this process as “teaching Mathematics in one
lesson and it is totally different from Language Arts lesson which follows or the Environmental Studies which follows later”.

All the teachers construed Separate Subjects as a focus on the cognitive development of the child and therefore on the academic subjects. They generally construed Separate Subjects as the practice of presenting the subject matter in their individual subjects without the possibility of connecting the subjects, that is, the opposite to integration. All the teachers shared this common understanding and from this working definition they shared their personal practical knowledge about the under-fives and a Separate Subjects approach.

Construing an Academic Focus approach

In their construing of an Academic Focus, the teachers identified a distinction between teaching the under-fives as 3-4 year olds and teaching the under-fives as 4-5 year olds. They made this distinction in terms of identifying the level and kinds of reading, writing and number recognition given to each group in relation to the age of the child. In explaining the need for a different focus in relation to literacy and numeracy for the two age groups, the teachers described the grouping of the under-fives in their varied contexts. They maintained that these groupings had a lot to do with the level of reading, writing and numbers taught in the education of the under-fives.

Three teachers in rural schools noted that their classes consisted of multi-aged or mixed ability groups where both three to fours and four to fives were in the same class. They explained their need to cater for each of these age groups in terms of a focus on literacy and numeracy. The older age group
they construed as being exposed to a greater amount, and a higher level of reading, writing and number than the younger three to four year olds. For example, Veronica described the distinction in terms of the activities provided for the under-fives.

On a daily basis I would have to do activities for the nursery children and while they are doing their activities I still have to be over at another table writing, doing writing with the four plus. I have vocabulary now from the wee nursery to the more intelligent child.

The other eighteen teachers in the various schools described their classes of under-fives in two distinct groups, the three and four year olds and the four to fives year old. The majority of the teachers noted that there was a greater focus at a higher level in terms of literacy and numeracy in what was taught to the younger under-fives as opposed to the older under-fives. The teachers in settings where the three to fours were in classes together referred to them as the "babies" and their classes called the nursery. Eight of them noted that they did not believe there was a need for a focus on reading, writing or number recognition, but suggested a focus on the social, physical and emotional development of the under-fives. The others indicated that they did focus on literacy and numeracy because it was expected of them but noted that they did so on a limited basis and for short periods during the day. Those who taught the four to fives referred to them as the "older" or "bigger" children and their classes called "reception". The teachers explained that they were expected to teach these older children to read and write and know their numbers.
However three of the teachers of the three to four age group did not make a distinction in terms of what they taught the three plus as opposed to what was taught to the fours plus. They indicated that in the initial stages these nursery children were exposed to activities that they perceived as pre-requisites to *Formal* reading, writing and number recognition. They further argued that because of the expectations of the parents, principles and teachers at the next level, during the second and third terms of the school year, the three to fours were exposed to more formal work in literacy and numeracy.

Having made these distinctions between the two age groups comprising the under-fives, the teachers then generally went on to construe the meanings attached to an *Academic Focus* approach. For example Gloria summed up the meaning of the term as noted by all the teachers. She said the under-fives were expected to be able to “count, write their names and write all the letters of the alphabet”. Mertie construed the practice as “formal work, writing early, writing their names and whatever else”. Diana too construed it as a focus on “Getting the child to write. And as soon as it can write well, to do Maths and English”.

Though they differed on the level of delivery of an *Academic Focus* to the various age groups among the under-fives, the teachers generally construed it as concentrating on the basic skills of reading, writing and number recognition or literacy and numeracy. They felt that the practice focused on the cognitive development rather than the child's total development.
Construing a *Whole Group* approach

The teachers shared the view that a *Whole Group* approach meant teaching the entire class the same lesson at the same time. However an area of concern for fifteen of the twenty-one teachers in construing the practice related to the issue of the size of a *Whole Group*. They based their construing of *Whole Group* teaching in terms of the number of children in the group, as verbalised by Lucille from a rural primary school, who said:

*Whole Group*, this depends on the size of the group. I think this has something to do with the size of the group. This group size, I do not think the size should be very large. We find that ... the numbers should be small.

The teachers’ opinions on the number of under-fives who could be in a *Whole Group* varied according to the school in which they taught. Four teachers from primary schools explained that they taught classes with an average of twenty-five under-fives in whole day sessions. They indicated that they felt that the maximum number of under-fives for a *Whole Group* was twenty and the minimum of fifteen. The four teachers in the nursery schools who taught no more than twelve under-fives per half day sessions indicated that the maximum for *Whole Group* teaching should be no less than twelve to no more than fifteen under-fives for each class. For example, Lucille, who had the experience of teaching in nursery school and primary settings, explained her choice of what she felt constituted a *Whole Group*, while noting the benefits to the children.

I will say a ratio probably fifteen to one, the most. I know where I taught before the ratio was ten to one, and that was very, very effective, it was ideal. Those children went on...when they went into the primary school, teachers were amazed at what they could do because naturally
you have the time, and I for my part, I would say I love ten to one. But in certain settings you have to accept fifteen to one.

Thirteen others who taught at primary or infant schools shared this view.

The teachers generally construed *Whole Group* as the practice where the same teacher taught the entire class of under-fives at the same time, in the same room, in a particular lesson. Though they varied in the number of children comprising an effective *Whole Group*, the general views expressed or implied from the teachers seemed to be that the practice focused on the individual's cognitive development rather than the development of the whole child.

**Construing Abstract Material**

Twenty of the teachers construed *Abstract Material* as asking the under-fives to imagine or think or reason concepts or ideas being taught without the support of concrete or real life material. For example Mary, from a nursery school, expressed a typical view. She said, "You say something and they can picture in their mind’s eye what you are saying". They explained that the practices entailed the teachers talking to the under-fives without the use of concrete or real life materials with the expectation that they listen and understand.

One teacher construed the term as the information drawn from the child, or as she put it, "comes from the child" and then used as a means of explaining other things to the child. She explained that the teacher in terms of clarifying, correcting or building new knowledge then used the ideas or information from the child.
The teachers generally construed *Abstract Material* as information that was presented by the teacher to the child without the use of support materials and examples. They comments suggested or implied that the practice focused on the cognitive development of the child.

**Construing a *Formal* approach**

All the teachers construed a *Formal* approach in terms of behaviour, content, method and setting that adhered to a particular format, with the teacher presenting information to the under-fives who were expected to sit in their respective places and listen. For example, Iris explained that most of the learning that was done in primary school was "kind of *Formal* in nature". She noted that it "catered well" to the "syllabus, curriculum to be covered", and *Formal* settings were used and *Formal* work taught, especially in the morning when the children were "fresh" that is, wide awake and ready to work. She explained:

> You will find sometimes that some types of *Formal* teaching is done, especially in the morning where you can bring all the children together and give them talks on health and anything - current events or something like that.

Three other teachers suggested that even though they did not really believe in the *Formal* approach for the under-fives, there was, as Ruby put it, "some kind of formality" used in the teaching of the age group. They dismissed the use of the method for the teaching of Writing and Maths but insisted that a *Formal* approach was needed when teaching social behaviours and getting the under-fives accustomed to school. For example, Ruby also noted that "these children must have a little *Formal* education in there". She gave an example of one of the things that children must be taught formally.
She explained “there are certain things you must know, well look, everybody cannot talk at the same time, put up your hand or whatever so that I would know you want to talk or something.

Wendy explained that the formality came in since ‘the children will have to be, at some point taught to sit quietly and listen. Carmen also shared a similar view about the “kind of formality” needed. She explained however that there was a need for the practice in terms of instilling correct behaviour. She sighted an example of teaching them that when “they are speaking they try to address the person to whom they are speaking”. These teachers shared the view that a Formal approach was needed in the process of socialising the under-fives in the appropriate behaviours used in the classroom.

Eighteen of the teachers argued that the content of any particular subject could be consider Formal, but when used as a practice in the classroom it meant that the teacher taught exactly what was to be done in a set and highly structured way. Diana from a rural school gave an example of a Formal approach in terms of the behaviour of the children and the teacher. She summed a Formal approach as “coming before a class, saying good morning, not only saying good morning, but coming in and say ‘well do this, do that’ and so on, to children sitting down in front of a set of tables and chairs, that is how our system is”.

The teachers generally agreed that a Formal approach, as it pertained to teaching, referred to a set of highly structured classroom behaviours and settings, teaching method and content designed to cater to the cognitive aspect of the child’s development. The general consensus among the teachers was
that the teacher, who delivered a particular topic to the under-fives as they sit as passive listeners in organised seating arrangements, would mainly dominate *Formal* teaching.

**Construing a *Structured* approach**

Ten of the teachers construed the practice in terms of the organisation of the daily timetable. They described it as a routine. For example Iris said, "From the time you come in you start and follow a routine. So you get into the routine of school as soon as you come in". These teachers described the sequencing of their day in terms of what was done first, what followed and what ended the day.

Eleven others construed the practice in terms of the sequence, organisation and presentation of particular activities and lessons. For example, Ruby from a rural school explained a *Structured* approach in terms of the lesson and being able to understand the sequence. She said: "The teachers should be able to move from step a, b, c and d. You start at ‘a’ and from ‘a’ to ‘b’. You cannot be hopping all over the place". Mary from a nursery school described a *Structured* approach in terms of providing clear and specific instructions to the under-fives. She stated:

I believed that instruction should be very specific, very clear, so that the children can understand exactly what the teacher wants them to do in a particular structure or a particular time constraint or whatever it may be.

These teachers spoke of structuring in terms of the organisation of particular activities. For example, Doreen described the need for *Structured* play. She said "Play must be *Structured* in such a way that the children get the maximum from whatever they are supposed to do". The teachers therefore
construed a *Structured* approach from two perspectives, the organisation of the programme on a daily timetable and the sequence, organisation and presentation of particular activities and lessons.

The teachers generally construed a *Structured* approach as a framework used to organise the day in terms of the organisation of the programme on a daily timetable and the sequence, organisation and presentation of particular activities and lessons. Their comments suggested that the practice reflected a child centred approach since it aimed to provide routine and organisation in which the under-fives could learn about school.

**Construing a *Teacher Directed* approach**

Three teachers felt that the approach meant that the teacher was the boss and in total control of the classroom. These three felt that the method focused on developing the cognitive aspect of the child. For example Ruby, who noted that the teacher needed to control the under-fives because of their age and classroom experiences, said “Teacher is the boss (laugh), well teacher is in charge of the children and I think the children need direction”. However, in explaining her definition of the boss, she explained the role of the teacher as that of directing what the children did. She explained that because the children were young and knew very little about the school process, the teacher had to tell them what to do. This process of telling them, she described as directing rather than dictating to the child. Monica construed *Teacher Directed* as that in which “the teacher directs and dictates what the children should do” and Doreen described it as doing what the teacher says. These teachers dismissed
the role of the child in the decision making process arguing that the child was too young to be involved in his or her own decision making.

However, the majority of the teachers did not adhere to this view. Eighteen of the teachers argued that they believed the child must be involved in the decision making process in the classroom while the teacher acted as a guide and facilitator of learning. For example, Deborah saw Teacher Directed as the teacher playing a part “in providing information, but not the sole provider of information”. Brenda construed the approach as one in which the “teacher has to monitor the situation, direct the children, and know where they want the children to be at the end of the day or week”. Iris construed the practice as that in which the teacher “should be around to help in some way” and be there, “to give some kind of directions”.

A Teacher Directed approach was also described in terms of explaining an activity to the child. For example Doreen said:

Occasionally the teacher has to direct some of the activities because children need to be guided at some point in time. So that is where the Teacher Directed activities come in. The teacher might have to make ... there might be teacher made aids there that need specific instructions for the child to follow, so that is where the Teacher Directed activities come in.

In addition to the role of instructing, these teachers felt that a Teacher Directed approach included acting as a guide, and selecting and suggesting particular areas where the under-fives can work and play. Iris explained:

She can say, well, all children playing with blocks can be here, and all the others who are playing with water can go to your corner. The Science corner is here. Who want to do art? Who want to draw and colour, you can be here!
Wendy described the teacher’s role as that of guiding “them into the kind of things that you want them to do, along the correct way”. This role, she continued involved “outlining the particular activity that they have to do and probably suggesting how it can be done.” The teacher as a guide was also described by Ruby as being “there to direct them in case they fall into difficulty, to lend a hand, to give a suggestion or idea and to help correct the difficulties”. Ruby further explained:

Even in free play you still have to get to the children, sometimes asking a simple question, encouraging the children, and open their store. Sometimes just ask the question, Why are you doing it that way? Is there another way you can do it? Sometimes even in free play you need direction.

Three teachers who taught at a rural primary school also shared the role of the teacher as a decision-maker. For example Maureen felt that:

The teacher has to monitor the situation and find out how the child is feeling because the children cannot always decide for themselves. The teacher also has to direct the children and tell them ‘well I think you should be doing this or doing that’.

The teachers construed Teacher Directed from two perspectives. They referred to it as a practice where the teacher was in charge totally, that is, directing and making all the decisions on behalf of the under-fives, or as a facilitator of knowledge. The general consensus among these teachers was that a Teacher Directed approach entailed guidance in terms of allocation to work areas in the classroom, explaining work, showing examples, socialising them to classroom life, instructing and directing in the content and the use of the materials and equipment in the classrooms. Their comments suggested that
when the child was the main focus, the practice catered to the total development of the child.

**Construing a Parent Involvement approach**

The teachers differed to some extent in their meaning of Parent Involvement. They identified and described two main forms of Parent Involvement. Five teachers saw the practice as that which allowed the parent to be fully involved in the life of the classroom, that is, physically present in the classroom and in the role of an assistant or aid. Ten referred to it as having the parents involved in terms of the support they could offer the teacher and help they could offer the child at home. Six teachers emphasised both the needs for support of the parent in the home and the parent helping in the classroom.

There was however, general consensus among all the teachers that the parents were needed as informants, keeping them (teachers) informed about the child and any problems they may have in the home environment. Their comments suggested that according to these teachers, when used effectively, the practice aided in the total development of the under-fives.

**Summary**

This findings in this section helped to answer the second research question, "How do the teachers construe the recommended pedagogic practices used in the education of the under-fives" posed at the beginning of this chapter. The findings suggested general consensus among the teachers in their understanding of the practices. Based on the explanations of the groupings on the principal components maps, it was possible to divide
teachers' construing into two broad areas: those that focused on the total development of the child as opposed to those focusing solely on cognitive development.

In particular the teachers agreed that the following practices were about the total development of the child. They construed a Child Initiated approach as allowing the child input in terms of initiating action or ideas in the classroom. They construed an Integrated approach as opposite to a Separate Subject approach, and as focusing all the subjects areas around a particular topic. A Child Centred approach was construed as focusing learning on the development and needs of the under-fives. An Informal approach was construed as removing formality via the removal of furniture and providing opportunity for freedom of movement and manipulation of materials and activities. Free Choice was construed either as granting the under-fives total freedom in the selection of activities or partial freedom with the teacher having some measure of control in the selection of activities. The teachers construed a Concrete approach as providing the under-fives with the opportunity to manipulate objects and materials in the classroom. The teachers agreed that teaching Individually was related to focusing on individuals in the classroom but they differed on the way this should be implemented. They construed the practice as either working with "weak" children in small groups or working on a one-to-one basis with the each child. Small Groups was construed as dividing the whole group into small groups and working with each group or individuals in the groups. Real Life Objects was construed as providing real activities, people, experiences, objects and
other materials for manipulation and visualisation. A *Structured* approach was construed as the sequencing and organisation of either the daily timetable or a lesson and activity. The three teachers who construed *Teacher Directed* approach as that in which the teacher was in total control felt it focused on developing the cognitive aspect of the child. The majority argued that the practice focused on the total development of the child when the teacher acted as a facilitator and guide in the learning process. *Parent Involvement* was construed differently by the teachers. They construed it as either allowing the parent full involvement in the classroom or as having the support and help offered to the child at home.

The practices that seemed to be associated with the cognitive development of the child included *Separate Subjects, Academic Focus, Whole Group, Abstract Material,* and a *Formal* approach. *Separate Subjects* was construed as opposite to an *Integrated Approach* and as teaching one of the subjects and then moving to another subject and teaching another topic. *Academic Focus* was construed in terms of teaching the 3-4 year olds as oppose to teaching the 4-5 year olds. The practice was generally construed as teaching reading, writing and number recognition to these age groups but at varying levels and details. A *Whole Group* approach was construed as teaching the entire class the same lesson at the same time. *Abstract Material* was construed as opposite *Concrete* and *Real Life Objects* approaches, and as using the imaginations of the under-fives to think or reason about concepts and ideas being taught.
Conclusion

This chapter presented the findings derived from using the principal component maps as a basis for interviews. The first section presented data related to the associations between the constructs and the practices. The second section explained the teachers' construing of the practices based on the coding of interviews. The findings suggested close associations between the majority of constructs and practices and they focus on either the total development as oppose to cognitive development of the child. The use of the principal components map enabled each teacher to express very relevant information about the practices. The next chapter details the teachers' construing of the practices within the five construct groups developed in Chapter Six.
CHAPTER EIGHT
The Teachers' Personal Practical Knowledge about the
Advocated Pedagogic Practices

Introduction

This chapter presents additional personal practical knowledge gathered from depth interviews with the teachers, based on the principal components analysis derived from the repertory grids. The repertory grid technique and principal components maps were insightful ways of getting information from the teachers since each individual talked about the practices from her perspective, that is, with reference to the elicited constructs and the associations or groupings on the principal components maps. The repertory grids and principal component maps provided the springboard from which the teachers launched into deeper construing of the practices and the researcher into deeper probing.

This chapter gathers additional data to answer the following question:

- What underlying factors compose their personal practical knowledge about the advocated pedagogic practices and how do these influence their use in the education of under-fives?

Data were gathered by open coding all interviews and looking for new themes within the five main areas that were derived from the constructs in Chapter Six. Results presented here differ from those in Chapter Seven, as conducting another analysis of the interviews using open coding allowed the data to "speak". New information could be gained through this process rather than analysing using the practices (elements) as organisers. In this way a
A richer more comprehensive picture is obtained. The five main areas, from Chapter Six, *Consideration of the Child, Benefits to under-fives, Classroom Experiences, Traditional Academic Focus and Teacher's versus Child's Dominance*, provided a convenient organisational frame for this data.

**Presentation of findings**

The teachers' personal practical knowledge about under-fives in school settings is presented across five major groups or themes as developed in Chapter Six. These themes emerged when the researcher placed the elicited constructs into groups by assigning meaning to each left-hand construct label. These five groups established were again used in this chapter as an initial basis for coding the depth interview transcripts. As explained in Chapter Four, the 21 interviews, which were transcribed verbatim, were word coded manually, with a specific label used in the margin for each major category from the five in Chapter Six. The coded texts were then identified on the computer, printed and filed in an appropriate folder for each category. The codes were also stored in the computer, referred to by page number, and then cut and pasted in the written text as needed. After this initial coding, coded transcripts in each theme were further examined to allow other themes to emerge. This was necessary, as analysis to this stage had been centred mostly on the elements. It was considered that data were richer than this initial analysis revealed. The other themes emerging from the data analysis were grouped under the five main themes. In this chapter, the teachers' constructions of their personal practical knowledge about the pedagogic practices are presented in general
explanations that are supported by examples with direct quotes from teachers.
In each group opposing views are also presented.

The chapter presents the data related to the five major themes. Two sections deal with the way the teachers construed the practices in terms of their Consideration of the Child, and the Benefits to under-fives. The next section deals with the theme Classroom Experiences, detailing the experiences described by the teachers about their use of the practices. The last two sections discuss the construing of the practices under the themes Traditional Academic Focus, and Teacher's versus Child's Dominance. Within each of the five main themes, data are presented dealing with new ideas that have emerged from coding of the interviews. This data offer another window into how the teachers construed the practices. Table 14 below gives the organisation of this chapter in terms of the five major themes and sub-themes.

The chapter ends with a summary of the findings, the contribution of the repertory grids and principal components maps to this analysis process and the conclusion to the chapter.
Table 14

The organisation of this chapter in terms of the five major themes and sub-themes

<table>
<thead>
<tr>
<th>Consideration of the Child</th>
<th>Home Environment for under-fives</th>
<th>School environment of under-fives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions of under-fives</td>
<td>How under-fives learn</td>
<td>Consideration of the Child</td>
</tr>
<tr>
<td>Attention spans of under-fives</td>
<td>Developmental experiences at home</td>
<td>Conditions of acceptance in primary/infant settings</td>
</tr>
<tr>
<td>Major goals of under-fives</td>
<td>Major goals of under-fives</td>
<td>Educational experiences</td>
</tr>
<tr>
<td>* Social development</td>
<td>* Social development</td>
<td>Early socialisation to school</td>
</tr>
<tr>
<td>* Emotional development</td>
<td>* Emotional development</td>
<td>Early exposure to materials</td>
</tr>
<tr>
<td>* Cognitive development and goals</td>
<td>* Cognitive development and goals</td>
<td>Transition to formal school</td>
</tr>
<tr>
<td>* Physical development</td>
<td>* Physical development</td>
<td>Development of oral language</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inadequacies of private schools</td>
</tr>
</tbody>
</table>

Benefits to Under-fives

<table>
<thead>
<tr>
<th>Monitoring the child's progress</th>
<th>Developing initiative and independence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of language</td>
<td>Developing self confidence and enjoyment</td>
</tr>
<tr>
<td>Development of learning experiences</td>
<td>Catering for the all-round development of under-fives</td>
</tr>
<tr>
<td>Limitations on learning experiences</td>
<td>Providing realistic experiences</td>
</tr>
<tr>
<td>Focussing on the child's interest and creativity</td>
<td>Providing realistic experiences</td>
</tr>
</tbody>
</table>

Classroom Experiences

<table>
<thead>
<tr>
<th>Contextual problems</th>
<th>Covering the syllabus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of resource materials</td>
<td>Other problems encountered</td>
</tr>
<tr>
<td>Teaching large numbers</td>
<td>Experiences with parent involvement</td>
</tr>
</tbody>
</table>

Traditional Academic Focus

<table>
<thead>
<tr>
<th>Personal development</th>
<th>Expectation of teachers and administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectation of parents</td>
<td>Expectation of teachers and administration</td>
</tr>
</tbody>
</table>

Teacher's versus child's dominance

<table>
<thead>
<tr>
<th>Teacher's versus child's dominance</th>
<th>Changing attitudes of roles of the teacher and child</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role of the child</td>
<td></td>
</tr>
</tbody>
</table>
**Consideration of the Child**

Analysis of interviews, using *Consideration of the Child* as a theme, resulted in three sub themes emerging, namely Perceptions of under-fives, School environment for under-fives, and Home environment of the under-five. Depth interviews revealed the factors construed within these categories about the use of the practices with under-fives (Table 14).

This first section presents the teachers' personal practical knowledge about the practices in relation to the theme *Perceptions of under-fives*. Within this category many sub categories emerged (Table 14), these included How under-fives learn, Attention spans of the under-fives, Major goals of the under-fives in terms of their physical, social, emotional and cognitive development. The coding process revealed areas of construing within this theme and these were recorded in the margin and the quotes from various teachers were compiled. Relevant examples from the teachers' construing are presented within each sub category. Each section ends with a summary of the data presented.

**Perceptions of under-fives**

As noted in Chapter Seven, the teachers argued that the practices had to be considered in terms of their focus on the total development of under-fives as opposed to cognitive development. In arguing the need for the practices that focused on the child, for example *Child Initiated, Child Centred, Individually, Concrete, Real Life Objects, Small Groups, Free Choice, Informal, and an Integrated Approach*, the teachers described under-fives in
many different ways. For example, Wendy and Iris described them as “just babies” and Ingrid saw them as “little people who could not even come down the steps”. Joan described them as “free, ...because children generally are free at this age”, and she felt that they should be free to express their thoughts and say what they feel, and how they feel. Veronica described them as “soft and pliable” with “minds” that were “pure and waiting to be moulded and fashioned”. Their “frailty” as described by all the teachers, can be summed up by Iris who felt that:

They do things without thinking. ...They will come and walk on you, they will come and sit on you, when they want attention they will hit you, they might step on your nice clean shoes, they may pull on your buttons and play with your clothes.

They contended that these perceptions of under-fives led them to believe that practices catering for their total development were needed in the classroom.

The teachers’ perceptions of the knowledge or lack of knowledge that under-fives brought to the classroom was also noted. For example seven other teachers hinted at the image of the child as a “blank slate” waiting to be filled. Ten others noted that the progress seen, and satisfaction gained, during and at the end of the period with them, were clear indications that the practices they were using were appropriate for the age group. Examples of this line of thinking expressed by these teachers was typified by Audrey who said:

It is a challenge in that it is like bulldozing the foundation, but we get results very quickly. Sometimes the child comes to you almost like a blank slate and in a couple of weeks’ time you can see progress. ...You realise that you are making an impact on the children’s lives, not only their intellectual development but also they social, they moral, their spiritual and their emotional development.
Diana also noted that:

When a child comes into the school...they are not children who come in knowing. They know very little. ...I would not say as empty slates because no child is an empty slate. ...When I was much younger, before you go to school, you had to know the Lord’s prayer; you had to know certain things. There are children who come to school and do not know these things.

Given perceptions of under-fives as babies, free, frail, waiting to be moulded, blank slates and lacking in classroom knowledge, the teachers generally argued that the practices used must be those catering to the needs and the physical, social, emotional and intellectual development of this age group. As a result of these perceptions, ten teachers argued that practices such as Whole Group, Abstract Materials, Formal and Structured did not cater to the needs and development of under-fives.

How under-fives learn

In further consideration of the practices, the majority of the teachers described under-fives as passing through developmental stages. These teachers noted that they based this opinion on the literature they said they studied either privately or during their primary and or ECE training courses. For example, Audrey one of the teachers trained in ECE, described learning for under-fives as “a linear process” and if not followed “in a sequence, or a step is missed, then the child was disadvantaged, and should be taken back to that missing link before progressing”. All of them argued that an Integrated Approach was a practice that allowed for a continual link in the total development of under-fives.
Under-fives were described by sixteen of the teachers as developing at different rates, passing through developmental stages at different times despite being the same age. These teachers noted that the focus then had to be on practices such as teaching Individually or in Small Groups, because each was not going to go at the pace of the other. Mertie, one of the teachers from a rural primary school, described an example of variations in a classroom setting in terms of individual development and differences. She said:

When they enter school, ... all of them will not be at the same developmental stage. So it means that there are some that I would have to work with more diligently than others, in terms of, one, developing them socially. Because some children, they do not like to share, they do not like to mix, they do not like to play with others, they might prefer to be alone, withdrawn and shy and so on. These are the areas where I would probably try to work with these children on... Then on the other hand there are some of these children who probably might be able to talk clearly and answer questions. There are some who cannot do it because they have not reach that development, and they cannot answer questions. Some of them would just repeat the same question you asked.

The general consensus among the teachers was that learning should not be a task that involved under-fives sitting quietly and working on formal tasks. Instead they noted that they saw it as active and incidental in some instances, and also associated with things that were in the environment. They suggested practices such as Concrete, Free Choice, Real Life Objects and Child Initiated as those that catered to the way under-fives develop and learn.

All the teachers further argued that these practices were also needed for this age group, since learning should be acquired through the active involvement of the five senses and not merely by rote. Ruby noted that these young children had "very inquiring minds at this stage" and were full of curiosity. All of the teachers noted that they felt that under-fives learned best
by doing and having materials there to manipulate. They felt that they needed methods that would allow them to move at their own rates while allowing them to improve and strengthen their finer muscles. The general argument was that the methods used should be those that provide them with materials that they can see touch and handle and manipulate. They felt that the practices which included *Child Initiated, Integrated Approach, Child Centred, Informal, Free Choice, Individually, Small Groups, Real Life and Concrete*, enabled under-fives to learn in this fashion.

**Attention spans of under-fives**

Seventeen of the teachers argued that the practices used should be those that catered for the short attention span of under-fives. They contended that practices that allowed for conversation, action and freedom were needed, especially since they believed that these children just came from home environments where they were free and unrestricted. They explained that under-fives were impulsive by nature and love to talk, ask questions and move around freely. These types of activities, they often maintained, were a reflection of their short attention span. Brenda explained,

> Children of that age, their attention span is very short and you have to do things that are interesting to hold their attention. This age group is very active and they are very talkative...they move around a lot.

These teachers noted that practices such as *Informal, Child Centred, Child Initiated,* and *Free Choice,* that focused on under-fives and granted them freedom of movement and expression were those that were needed in ECE classrooms.
Major goals for under-fives

The teachers argued that in considering the practices, there was a need to consider the goals they envisaged for under-fives. The overall aims identified by the twenty-one teachers focused on developing each individual’s creativity, independence, confidence and sense of responsibility. In these teachers’ thinking, the importance of having goals was epitomised by Diana, from one of the rural schools. She said:

Each child is different and we have to look at the needs of the child rather than what we want. Each person wants the best for their child but what the child is capable of doing is something different, and we have to cater to that.

In terms of independence and creativity, all twenty-one teachers felt that under-fives needed to be encouraged to develop their initiative by doing things for themselves. They argued that practices such as *Child Initiated, Informal* and *Free Choice* that allowed the child to make decisions for him or herself were needed to develop these areas. Audrey exemplified the teachers’ visions of the independent and creative under-five:

Able to do chores for themselves like dressing themselves, tying their shoes’ laces, buttoning their coats and their blouses. Those things would also lead to developing their positive self-esteem since they will be able to do something for themselves.

Fifteen of the twenty-one teachers also added that decisions made by the child, when these practices were implemented, resulted in the building of self-confidence and develop in them a sense of responsibility. Ruby from a primary nursery class illustrated the views expressed by other teachers about the need for building self-confidence and completing a task, when she said:
Our children depend on other children. They always look to see what somebody else is writing. I like when you give children activities and they go and they sit and complete it by themselves. So completing a task is important.

The teachers also argued that the practices used should be those that focused on the development of the whole child. All the teachers explained or hinted that they aimed to develop the social, physical, emotional, mental or intellectual areas of each child. Deborah from a rural infant school embodied the kinds of goals identified as needed by the majority of teachers for each category:

They would be goals that would help them to develop totally. Physically, so that they would have their physical activities. Socially, they have their small group activities as they work together. I would think in terms of the need for intellectual stimulation. The classroom would be geared towards the introduction to language, words, numbers, print, the introduction to print, which would stimulate their interest in the academics. ...Also a goal based on developing their creativity, their aesthetics, drama, singing, music and movement...also morally, teach them moral standards and of course spiritual standards. ...I would work towards helping them to develop the total person.

The general consensus about the total development of under-fives is summarised in the following sections.

Social Development

Eighteen of the teachers described the social aims as respecting others and their property, using social conventions for politeness such as 'thank you' and 'excuse me', working with one another, developing their ability to share, co-operate and work quietly and peacefully and developing their ability to play, mix and interact with other children while practising acceptable social behaviours. For example, Audrey gave a typical explanation of social aims:

To be able to work with their peers in an acceptable manner, not having to snatch, grab. ...Saying things like please and thank you,
waiting their turn to use materials. They should be able to enjoy group activities whether indoors or outdoors, while having their games and so on. They should be able to sympathise with each other, if somebody is hurt, they should be able to give them a word of cheer, hug them, and encourage them. All that will help them to develop their social skills.

**Emotional Development**

Thirteen of the teachers described emotional developmental as developing loving, confident under-fives who were not afraid to express themselves as they settled into the school system. These teachers also felt that good discipline and a sense of pride in work well done should also be developed in under-fives. For example Ruby highlighted the importance of focussing on the social and emotional development of under-fives:

Social and emotional developments begin at the birth of a child. If they are not fostered positively in early childhood, the characteristics that children should develop at that stage, which would help them to build strong characters later in life, would not be developed if they were deprived appropriate developmental activities and experiences during early childhood.

Twelve of these fifteen teachers indicated that they had greater expectations for emotional development than the other three developmental areas, since this led intellectual and physical development. Angela from a nursery school gave an example of the importance of building self-confidence and its effect on the intellectual development:

The little boy there, when he first came here, he would tell me, "teacher, I cannot" for everything I tell him to do. I said, "no, you can, you are a big boy, you can". He said, "but teacher, I cannot". I said, "let me show you". And I will start here, and I said, "now you see what I do? You do that". And he would do it. And I said, "that is good", and he would look at me and laugh. And now, he is the best pupil I have at the table. He fixes puzzles, he laces, he could match, and he could do everything. And he used to tell me, "I cannot"! The thing is to build up that self-confidence in the children.
In the process of building their self-confidence, Angela and fourteen other teachers noted that there was a need to reassure under-fives that they were capable of doing what ever they had to do. Angela further explained the need for reassurance:

If you reassure these little ones that they have the ability, they might not be able to do it like you or the other child, but that reassurance means a lot to children. Reassurance and self-confidence can help the child to get over any barrier that they think they cannot get over.

The general consensus among these teachers was the need for practices that involved the direct guidance of, and interaction between the teacher and the child. They felt that under-fives needed the influence and reassurance from teachers in order to develop their decision-making abilities. They contended that given the large number of children in the classroom, these were achieved by including practices such as *Teacher Directed* sessions in a *Formal* and *Structured* environment in the classroom.

**Cognitive development and goals**

All the teachers argued the need for cognitive development of under-fives. Five of them argued however, that even though aspects of an *Academic Focus* were needed, these should not be the most important areas of concern in the nursery, especially in terms of reading and writing. They further argued that those areas that were taught should be implemented incidentally and through play oriented practices they deemed suitable for the age group. These included *Child Initiated, Integrated Approach, Child Centred Informal, Free Choice, Small Group, Concrete, Real Life Objects and Individually focused practices.*
The other sixteen argued that because the education system demanded a focus on the academics, then more Formal, Whole Group, Separate Subject, Teacher Directed practices were needed to implement an Academic Focus. These sixteen teachers outlined the major cognitive goals to be taught to this age group as recognising shapes, letters and colours, carrying simple messages, matching pictures, numbers and letters, knowing letters and numbers, counting, developing good diction, understanding concepts such as under/over, big/little, expressing themselves freely, and following instructions. In terms of aesthetic development, all the teachers agreed that the areas of drama, singing, music and movement were very important. The other five teachers agreed with Audrey's description of the goals in terms of cognitive development. These included:

To be able to speak in sentences when asked questions; to carry on a conversation with their peers or adult about something that is happening to them, or something that is happening in their environment; to be able to recognise objects and activities in their environment, and discuss them; to be able to differentiate the differences in sound, whether there are loud sounds, soft sounds, be able to hear sounds and say exactly what they are, and for the auditory skills to be developed for their particular age group. Another goal would be for the visual discriminatory skills to be developed which would lay the foundation for being able to discriminate between words, and be able to call them correctly, which would further lead to their ability to read.

These five teachers also objected to the direct teaching of letters and numbers, indicating that these should be done incidentally. All the teachers expressed the view that they did not believe under-fives needed to be taught to write. At least ten of them noted however, that some under-fives arrived in
school with writing skills and others displayed an interest by the third term of the school year, and their needs should be catered for in the classroom.

Physical development

The teachers indicated the need for practices that developed the physical domain of under-fives. The areas of focus included developing hand and eye co-ordination, fine motor skills and gross motor skills, and develop self-help skills such as buttoning their clothes, tying their laces and mastering skills with their hands. They felt that practices Free Choice, Informal, Child Initiated, Teacher Directed were among the practices that were important to the physical development of the child.

Of major concern to some teachers was the problem of the development of gross motor skills. Four teachers argued that they felt that the physical development of under-fives was important simply because many of the children were not given the opportunity to develop this area at home. Joan gave an example of a child, who she felt was very intelligent and from a middle income home, but was deprived of the opportunity to run around. She said:

He is left at home with his computer and his video and he can look at any dinosaur and name it (and know that it) only eats this and only eat that. He can tell me all of these things but when he first came to school he could not run, because he did not know how. ...When he ran it looked so uncomfortable, so strange when he runs, because he never ran. He does not climb, and he does not go outside.

The teachers concluded that under-fives needed to be exposed to practices that allowed them freedom to develop physically. These practices they contended were those that focused on the total development of the child.
Summary

This section highlighted the teachers' Perceptions of under-fives. It argued the need for practices that developed the whole child and cater for under-fives perceived as babies, free frail, waiting to be moulded, blank slates and lacking in classroom knowledge. It detailed the teachers' perceptions of the way under-fives learn, describing them as passing through developmental stages and developing at different rates. It argued that practices focusing on the total development of the child were also needed to enable learning through active involvement of the five senses, as well as support the short attention span of under-fives. These practices included Child Initiated, Integrated Approach, and Child Centred. Informal, Free Choice, Individually, Small Groups, Real Life Objects and Concrete.

This section also identified the major social, physical, emotional and intellectual goals the teachers said they envisaged for under-fives. They contended that the social goals included respecting others and their property, using social conventions and co-operating and working with others. Emotional goals were described as developing loving discipline, and confident under-fives. Cognitive goals included the ability to recognise and match shapes letters and colours and understanding concepts as well as developing the aesthetic areas such as music, singing and movement. Physical goals included developing hand and eye co-ordination, fine and gross motor skills. It contended that practices perceived as focusing on cognitive development, such as Whole Groups, Formal, and Academic Focus were needed in the cognitive and emotional development of the child.
The next section highlights the teachers' consideration of the child in terms of the home environment from which they come.

**Home environment of under-fives**

The teachers also construed the use of the practices with under-fives in terms of the home environment from which the children came. The sub themes emerging from the analysis of the interviews are outlined in Table 14. They argued the need to have under-fives who left the home environment at this early age exposed to practices that catered to their total development. They highlighted areas such as the need for parents to work and the perceived lack of developmental experiences in the homes, while identifying the advantages of an early start. They also highlighted their perception of the inadequacies of the private schools as an alternative to the government schools. Each section closes with a summary of the findings presented.

**Parents at Work**

Eighteen of the teachers considered the fact that parents worked as one of the main reasons for using practices that supplemented the home environment. They argued that working parents needed to find alternative arrangements other than the home for their children, and as a result they enrolled under-fives in schools. Wendy from a city school made this point, commonly held by most teachers, she said:

> But then you look at the parents having to work, the parent having to leave home to go to work. Then they either send the children to nurseries or nursery schools, or a relative keeps them.

Eight of the teachers said they believed that parents needed to work because of the economic benefits to the family. They explained that most of
the children came from one-parent families, mainly with the mother as the head of the house and main 'bread winner'. Iris from a rural school gave an example of the dilemma faced by some of these mothers:

A mother might have a three-year-old at home and a four-year-old at home and she might have been glad for the opportunity to work, and probably the opportunity has been offered to her. But because she has to stay home with the children she cannot take it. You will find that if she comes here and asks, "Would you please take the child?" And explain the situation, and we say "oh yes!" Then you find the mother goes and work and that would be helpful in supplementing the home budget.

Four of the teachers, who agreed that parents needed to work, felt that this may result in some of under-fives being neglected. Diana from a rural school explained the views expressed by these teachers:

When a child comes into the school it has just left home where in most cases the mother and mostly the parents are usually working, ...parents are out there working and they have not got much time for the children.

Diana and the other three teachers expressed the view that the decisions they made as teachers in the classroom in terms of the pedagogic practices needed for under-fives, were in an effort to supplement the home environment. These teachers noted that supplementing the home meant that the classroom needed to have materials and equipment to which the child could relate. These included, for example, a home corner with miniature stove, table chairs, cutlery, crockery, and a dress up corner. They noted that Child Initiated, Integrated Approach, Child Centred, Informal, Free Choice, Individually, Small Groups, Real Life and Concrete were practices that they felt provided an environment similar to that in the home. These teachers along with the others generally agreed that parents were responsible for providing
some basic pre-requisites before the child entered school. However, they argued, since many of the parents were working the areas they perceived to be lacking had to be identified and provided for within the school environment.

**Developmental experiences at home**

The teachers construed some developmental experiences they perceived to be lacking in some homes. Fifteen teachers, who agreed that under-fives should be exposed to practices that catered to their total development, shared this concern. Audrey, one of the teachers from a primary school identified some of the developmental experiences noted by other teachers as lacking in the homes. She said:

I find that the children need to have those early experiences because lots of them are not properly exposed to any proper developmental experiences at home. You find they hardly have any skills, the language is impoverished in some way and the language structures are very vague.

The other teachers further noted some of the fundamental experiences they felt were lacking in most homes. For example, ten of the fifteen teachers above noted that some under-fives came from homes deprived of toys and books, and did not have opportunities for grown-ups to read them stories or fix puzzles. They argued that practices that provided under-fives with the opportunity to interact with and learn from each other were those they deemed suitable for the nursery classrooms. They explained that under-fives benefited since they shared experiences with a variety of children of their own age group but from different backgrounds. They further explained that the interaction with other children could compensate those from backgrounds they felt did not
cater to the total development of the child. These points were illustrated in the following comments. Iris said:

At home, it is only the child, the grandmother and the mother and it is kind of limiting. The child who comes from a middle class family, who is better off so to speak, when that child brings to school toys, books etc., he can show it to that particular child. Now if that child were at home it would not have a book, it would not have anything, not a tape that you can see or anything like that. And that child it might be a dull child through no fault of his or hers but because the parent is poor, does not have enough income.

Diana said:

Sometimes when parents come home the children are in bed, ...they are going to be those parents who are going to see about their children or are going to put some system in place where their child gets to know certain things. But then there are the majority who are not going to have that, who do not have the means to have that.

Joan also noted that under-fives in some homes faced deprivation in terms of the lack of materials. She felt:

Parents at home do not let them cut, do not let them write, do not let them do anything... This year I was really shocked when a lot of children, more than half of the children come in and you ask them, do they have puzzles at home? No, they had never, never come across a puzzle in their whole three years of life. So I said to the parent, "Does he have puzzles at home? No or one parent said, "he got one put up somewhere"! So I think that these schools, for these three and four year olds are good for a certain kind of child. Children, who are mentally deprived at home.

Seven of the teachers argued that from their experiences in the schools they felt that the child from "poor homes" as well as those from "middle class families" benefited from the experiences offered in nursery classes and nursery schools. Joan from a nursery school summarised the views shared by these teachers in this statement:

They are children of parents of high social standing, of good academic backgrounds, of good money, and these children might have computers at home, they might have video at home, but again they do
not have social skills. And they come here and they do not know how to run...they may have computers and videos but still they have the other aspects of their development they have been missing.

Joan, like the other teachers explained that as under-fives socialised and worked together in the classroom, and with the help of a competent adult, they influenced each other in positive ways. These teachers argued that there were no limits to the type of child who could benefit from this early start in school as oppose to beginning school at five years. Joan's comment typified the views expressed by the other teachers as she shared her thoughts about the type of child that would benefit from the practices offered in nursery education:

It (nursery education) is good for certain kinds of children. Those types of children where their parents, not necessarily poor, they could be rich as well, where parents do not have the time, or the knowledge, or the understanding of the importance of talking to a child, explaining to a child and showing their children, or of teaching a child.

In addition eight teachers also expressed doubts about some of the relatives in whose care the “impressionable under-fives” were left. These teachers warned that some relatives were not always good role models, and this was reflected in the bad habits exhibited by under-fives when once they arrived at school. For example, Sonia noted that some of under-fives cursed or used bad language and did not respond when spoken to. She, like the other teachers felt that a responsible adult needed to be given the role of caring for under-fives while the parents worked. She explained:

The first five years of a child’s life is very important, that is the time when the child should be moulded. I discover that when children stay at home so long that they copy bad habits and incorrect language...I am of the opinion that most children benefit tremendously when they are left in the care of a competent adult such as the teacher.
The benefits to be derived from an early start to the programme offered in school were exemplified up by Audrey, who said:

There is need for the exposure to the child centred curriculum even before formal schooling, so that they can have the pre-requisite skills - the pre-math, the pre-language skills, the pre-writing skills. They can have those pre-requisite skills that are essential to laying the foundation for them then, to go on to higher order skills late in school.

In addition, all of the teachers expressed concern about establishing links between the home and school in this initial stage of education of under-fives. They argued that they felt that those practices that replicated the home and activities done there were those appropriate for this age group. They described practices that encouraged warmth and excitement, freedom and conversation in the classroom as appropriate. Wendy, from a rural primary school, embodied the view shared by the other teachers, when she said “They just come from home and they might miss their mummies or guardians. They need to feel welcome, as though they are not missing what they left behind”.

Advantages of an early start

While considering the use of the pedagogic practices with under-fives some of the teachers identified some of the advantages derived from an early start, that is beginning formal education at three instead of five years. Twelve of them felt that their views about the pedagogic practices in terms of the early transition from home to school were based on the advantages they felt under-fives gained when they were in schools. Some of the areas identified included, early socialisation to school and exposure to materials, providing a smooth transition to formal school, and the development of literacy.
Early socialisation to school

Ten of the teachers argued that they believed that early childhood programmes delivered via practices such as *Child Initiated, Integrated Approach, Child Centred, Teacher Directed, Informal, Free Choice, Individually, Small Groups, Real Life* and *Concrete*, set the foundation for instilling the behaviour expected at school, at an early age. Angela from a nursery school explained:

A child coming to school at three and four, it is a good idea because you are helping that child, you are giving it a foundation, you are giving it a setting, you know, getting it accustomed.

These teachers also highlighted the disadvantage to under-fives when they missed out on an early socialisation to school. Doreen from a rural primary school explained this view expressed by the other teachers. She said:

“Teaching the small children for a number of years, I find that the five year old that come into school for the first time are sort of out of place. And sometimes the small ones, they laugh at them”. Iris too shared the view expressed by the other nine teachers on the way the early start helped in the socialisation to school. She said.

I find that these three-year-olds, when they come in they get the feel of school. I find that prepares them for the school itself. When they get five, I find that it helps them to socialise, coming and sitting down with other children and playing, it helps them to socialise.

Lucille’s comment typified the views shared by the other teachers about the end result of the early socialisation process when she said:

I think it gets them ready for the five-year-old class. By the time they are finished with nursery they are ready to kind of settle in. They know what school life is all about they are accustomed to coming to school for a whole day.
Four of the ten teachers acknowledged the problems of settling in to school life but expressed satisfaction at the results seen when once they were settled. For example, Deborah from a rural infant school described the process of socialising under-fives to life in the classroom:

The first couple of weeks can be really difficult. Some of them come from home unable to do anything; they cannot even recognise their bag, their lunch box, and they cannot tie their shoelace and all that. The first term can be difficult, but after they have settled down and I begin to realize that they are taking in the information that is being given... then you begin to feel good, to start to see the progress that is being made. ... By the third term you see completely different children. You are able to see where they come from and where they are now.

Sonia too noted the progress that she observed:

I can see the results after a year. Unlike other classes where you expect the children to acquire certain concepts and perquisites for certain skills, you start at nought and you are able to observe the child's progress.

The teachers contended that there were advantages to giving under-fives an early start in school.

**Early exposure to materials**

These ten teachers also argued that an early experience at school exposed under-fives to materials used in the various practices. As a result they argued, under-fives are more settled than the five-year-old who came into formal education at the same time for the first time. Angela's comment personified the view expressed by the others. She said:

If you compare the two, a child who has been exposed to nursery education and one who has never been exposed, I think that the advantages of the “three” year old is greater, a lot greater than the one who has not had the opportunity to come into the setting. I think it is good.

Doreen identified these advantages noted by the ten teachers.

She said:
The children from the nursery school are more exposed to materials, they know the materials and things like that and it is sort of awkward for the big five. It is important that they come early, as long as they are ready for school.

These teachers argued that the early start at three helped under-fives to settle and understand life at school. As a result when the formal aspects of school started at five they argued that they would not feel uncomfortable or out of place.

**Transition to formal school**

Eight of the twenty-one teachers agreed that an early start facilitated a smooth transition into formal education. They explained the problem a child at five may face when he or she arrived at school for the first time. Their views are embodied in this comment made by Iris who taught at a rural primary school. She said:

Years ago, when the child got to five years they used to cry and want to go back home, and when a child went back home at five it was not really sensible because that child would be losing on the formal setting of the school work. I think it gets them ready for the five-year-old.

Deborah's comment further described the transition for under-fives on the first day at school:

They are at home all the time and on this particular day they are all dressed up in these particular clothes, taken to this strange building, see these strange people and left there with these strange people.

These teachers argued that the child at age three had more time to adjust to school since they were not at the official age for starting school. Four of them suggested however, that the start of school for the three-year-old would be less traumatic if they were allowed to visit and then spend time at school before they are enrolled for the first time. Deborah explained her view
of this suggestion voiced by the other three teachers in this statement: “They
be brought in, it could be the third term if they are going to come in the first
term, during the term at intervals”. This process they felt, would help to
improve the transition from home to school for this age group.

The teachers described how some practices aided in the transition from
home to school. For example, Audrey, like eight other teachers, spoke of Child
Initiated, Child Centred approaches as means of making the transition to
school a less “dramatic” experience for under-fives. These teachers contended
that these practices could be used as a link between the home and the school by
organising the classroom similarly to that of the home in terms of toys and
Concrete materials and Real life Objects with which they were familiar. She
further argued that the children within these setting should be free to interact
with the material and learn through initiating their own activities. Wendy
shared a similar view and describes how the classrooms’ resource centres
linked home and school:

Like say household corners and so on, where the children should be
able to feel a sort of feeling as if they are still in their home sort of
environment where they see familiar things like pots and pans and
little ironing board and irons and so on, and develop their own play.
Take for example, dress-up corner, they can act out what they feel and
what they see everyday in the adult world, and in so doing, they can be
able then to express themselves in the way they can, at their level.
And these things tend to help them on in life, to express themselves,
perhaps to feel how other persons, have an idea of what other persons
may feel in certain situations and so on.

Six teachers expressed the view that parental involvement can be of
benefit in terms of helping the child to bond with the teacher in the school
environment. Audrey felt that Parent Involvement was important because of
the established links between the parent and the child as opposed to the teacher and the child. She argued that the child, in the initial stages viewed the teacher as a stranger, and to break down that barrier the parents needed to be involved. She said:

We have to remember that the child has spent its first two or three years with its parents, and sometimes the teacher is a total stranger. And the child might not have had the opportunity to interact with other people, with other groups before coming to school. The parent can help to bridge this gap between the teacher and the child.

Angela also viewed the teacher as the “stranger” to whom the child must become accustomed. She highlighted the importance of parents in the transition of the child from the home to the school environment. She explained:

Remember that I am not their parent. But we got to understand that a three year old coming in school and seeing all these things around it, there is nothing it can do but just be surprised and probably in their little minds asking ‘What am I doing here?’ I mean, ‘What is this place?’... And they are coming from different homes... because you know some children come from homes that are loving, and they have this mother and child relationship ... even at home it is only you, mummy and daddy and a little sister.... You come into a school with a lot more, ... and seeing different faces, ... it is not mummy’s face, it is not auntie’s face it is a face that you have never seen before in this world. And different atmosphere, ... you have got to come and learn to share, you have got to learn how to sit down and listen to a stranger, here is a face that you have never seen before! So what you are doing is just trying to win the love of the children and I try to gain the respect and confidence from their parents, so they would know, well here is someone who have my child’s interest at hear.

Five other teachers also shared Wendy’s view on the importance of parents in linking the teacher and the child in the transition from home to school.

Wendy said:

*Parent Involvement* is also important in the early childhood situation because the children are very young and they have not long come from
home, and there is still this link and this bond with the mother and the parents generally, I should say. Even though the teacher would take the place of as it were, the parents are very, very important to the child’s life.

The teachers concluded that practices that focused on the child were those that aided in the transition between the home and the school.

Development of oral language

The teachers noted the advantages the practices provided in terms of the development of oral language. Fifteen teachers commented on under-fives’ development of oral language in relation to an early start at school. Audrey captured the thoughts of the other fourteen teachers about the children’s language before they come to school. “You find they hardly have any skills, the language is impoverished in some way, the language structures are very vague”.

The general consensus among these fifteen teachers was that children at home were exposed to a lot of baby talk and in some instances cursing and other forms of bad language. Veronica, a teacher from one of the rural schools, explained an example of oral language development these teachers felt they needed to cater for in the classroom. She said:

In the classroom, we try to get the infants to speak, little ones that just come to school, to speak English, not to sing or not to babble because they can understand. So we use vocabulary that is in their age range and introduces them to correct words. We get children coming to school saying that they want to “do-do”, you know, they want to stool. We introduce the correct words.

Veronica explained that to her, the ‘correct’ words were those that were accepted as the norm for the classroom. She, like the other fifteen teachers stressed the importance of instilling in under-fives ‘correct’ terms. Doreen also
gave an example of the importance she attached to ensuring that accepted
language patterns were being used in her class. She said:

When they come they tell me all sorts of things and they call
all sorts of names. I was telling a child once the word is stool,
and all I do the child was still telling me the same (wrong)
thing. And I lashed (spank) it one day...and you do not know I
did not have any problem since!

The other teachers did not describe going to such drastic (in the researcher's
opinion) lengths but they also acknowledged a struggle to develop the oral
language skills of some under-fives when once they were in the school
settings.

These fifteen teachers shared the view that oral language development
among under-fives occurred as under-fives got less exposure to 'baby talk'
they felt was used at home and opportunities to participate in the various
practices used in the classroom. These practices they noted exposed under-
fives to activities such as stories telling and drama, talks with other children,
interactions with the teacher and opportunities to hear and use sentences. Ruby
explained the advantage of interaction among under-fives, shared by the other
teachers when she said, “Nursery schools allow the child to talk with other
children that are of similar age using sentences. Interaction with other children
results in an improvement in language development”.

The general consensus among the fifteen teachers was that language
problems, which they identified as including, among others, the lack of
vocabulary, vague expressions, poor grammatical expressions, were often
identified and treated in these school settings. They noted that when, as
sometimes happened, some individual needs were not catered for and the
language problems were not remedied, they continue through out the child’s primary school years and led to failure at an early stage. For example, six of the teachers cited the fact that some children reached age eleven and were not reading and writing despite the fact that all children were exposed to the same content knowledge. They, like the other fifteen teachers felt that failure at this age was due to a past focus of teaching just for success in the Barbados Secondary School Common Entrance Examination, reflected in practices used in the classroom. These practices they explained, were based solely on an Academic Focus, Formal, Teacher Directed, Abstract and Whole Group approaches. The general consensus was that drastic measures needed to be taken, starting in the early years. The fifteen teachers expressed the view that the problem of oral language development needed correcting by focussing on the child, as well as reviewing the practices used in the presentation of knowledge to the child. Joan, one of these teachers explained:

> You need to understand that every child does not learn the same way. Every child has his own learning methods, and if you teach the letter “m” and one child does not understand, it is not because that child is stupid, it is because you are not bringing it to him. And I believe this. I believe every child can learn. It is just you have to find the way to bring it so that you bring it one way today, and another way tomorrow and just go on with it, you know, different methods.

These teachers drew the conclusion that skills and knowledge presented to under-fives should be done through practices that allowed them to be the centre of focus in the classroom. These included the use of the practices such as Child Initiated, Integrated Approach, Child Centred, Informal, Free Choice, Teacher Directed, Individually, Small Groups, Real Life and Concrete. However, to implement such a programme, these teachers
suggested that certain conditions needed to be in place. Their views on these conditions are explored in the next section that examines the school environment.

Inadequacies of private schools

Ten of the teachers noted that some parents were sending their under-fives to private nursery schools from a very early age. They expressed concern that these schools were exposing under-fives to practices that did not cater to their total development. They said they drew this conclusion based on the fact that under-fives were arriving in government schools at the age of 3+ performing activities such as writing their names with all capital letters and repeating multiplication and addition tables. These teachers voiced concerns that the private nursery schools were not catering to the needs of under-fives. They explained that they were concerned about the curriculum and practices in private nurseries which they described as offering high levels of academic teaching in formal settings, delivered by teachers who were not trained generally in education or specifically in early childhood education. As a result they argued that the basic pre-requisite skills were not there. Diana shared her experience in this matter, she said:

I have found that at some private nurseries, children are taught to add and subtract and those kinds of things. I have had an experience with a child coming in at three or four and that child was telling me big numbers.

Audrey also shared a similar view:

Although there are lots of private nursery schools rising up out there in the society, most of the people are not trained, so they themselves are doing a lot of academic work with the children. The children are introduced to a lot of formal work.
These ten teachers described the task of unlearning the wrong, and taking the child back to the basics and building up again. They generally agreed that the process of relearning and learning had to be done in a manner that was ‘pleasing’, but yet suitable to the age and development of under-fives, and these were reflected in choice of pedagogic practices.

The general consensus among the teachers was that the education offered to under-fives in the government school was delivered via practices and with training they perceived lacking in some private schools. Diana, one of the teachers captured the view expressed by the others when she concluded that “if the child can go to those private nurseries and be taught the wrong things, then he or she can be accommodated at the government school and be taught the correct thing”.

Summary

This section presented the teachers' personal practical knowledge about the home environment from which under-fives come at age three, and the need to expose them to practices in schools that catered for their total development. They argued that because parents needed to work for economic reasons, they enrolled their under-fives in schools and these institutions supplemented the home. They described the lack of developmental experiences in some homes, detailing the lack of educational materials and competent adults to stimulate under-fives. They felt that practices that linked the home and school to the extent that they encouraged warmth, excitement, freedom and conversation were needed in schools. The teachers also identified advantages to an early start at school, that is, beginning school at three years. These included the
opportunity for early socialisation to school, exposure to educational materials, a smooth transition to formal school, and the development of oral language. They also highlighted their perception of the inadequacies of the private schools as an alternative to the government schools. They expressed concerns for practices such as writing names, and learning tables, taught by teachers who were not trained to teach these young children. The consensus among the teacher was that under-fives needed to be exposed to practices that catered to their total development, these included Child Initiated, Integrated Approach, Child Centred, Informal, Free Choice, Teacher Directed, Individually, Small Groups, Real Life and Concrete approaches.

The next section presents the teachers' construing of the school environment for under-fives.

School environment for under-fives

The teachers construed the use of the practices against the kind of school environment in which under-fives were taught. The sub themes emerging within this category, outlined in Table 14, include Conditions of acceptance in the primary/infants settings; Flexible programmes; Trained teachers; Provisions of essential facilities; Elimination of disparity between schools; The dilemma about half day or whole day; Improving the teacher to pupil ratio; Considering the children’s responses and Enjoyment while learning. Each section ends with a summary of the data presented.

Conditions of acceptance in the primary/infants settings

Fifteen of the teachers totally accepted under-fives in nursery schools and nursery classes in primary and infant schools. The other six, while
accepting them in school expressed some doubts concerning the trend of enrolling under-fives in the primary and infant schools without the necessary infra-structure in place. The fifteen who voiced their approval used terms such as “excellent”, “necessary” and “needed” in expressing their total support of under-fives in schools. Of the six who expressed some concerns, three described under-fives as “just babies” who still needed to be at home with their mothers, while another noted that the role of the teachers was being reduced to that of “baby-sitters” in schools. The general consensus among all the teachers, however, was that since under-fives were in schools, then the necessary infrastructure for implementing practices catering for this age group should be in place before enrolment. The teachers highlighted a number of conditions they perceived as determining the use of the practices with under-fives in the school environment.

In order to maximise and cater for the needs of under-fives the teachers from the nursery, primary and infant settings argued that certain conditions needed to be adhered to, in order to implement effective practices. They noted the need for flexible programmes, trained teachers, provisions of essential facilities, elimination of disparity between schools, a settlement of the half or whole day dilemma, and an improvement in the teacher to pupil ratio. Their personal practical knowledge expressed on these areas is presented below.

Flexible programmes

Eighteen of the twenty-one teachers argued that based on their training and observations, they felt under-fives were different from the older children in primary schools and they should be treated differently in terms of the
programme to which they were exposed. Eight of the eighteen teachers felt that there should be a flexible programme in place for under-fives, allowing them to be exempted from prayers or morning assembly and lunch time play with the older children in the primary and infants school. They argued that under-fives should be given the opportunity to learn about school without the embarrassment that may be associated with interacting with the rest of the school. Some teachers shared their reasons for a separate environment.

Ingrid, who was teaching at one of the nursery schools, drew the following conclusion based on her training experience in a primary school:

I do not like them in the primary setting unless you are going to have an area that is free for these children, so that they do not have to go to the same prayers as the other children. If they wet themselves, it is a great big thing, if they spill something, it is a great big thing. And then they have this thing that from lunchtime they are back with the bigger children. I do not like that for those little children!

Iris, a teacher in a rural primary school also shared her experience:

Here at our school we have assembly on Mondays and Fridays and these children have to go down. And sometimes that assembly lasts real long, half-hour, and everybody has to stand up like straight jackets. I find that the teacher who does not understand these little children would come and say, “stand up properly.” Some children might be leaning over the desk, or stooping, being tired. You might find that the child was there for too long. Even in prayers, you would find that the teacher is talking or telling a bible story, and the little child starts to play or turn around and look at the birds, something so, and the child gets a lash. (The teacher says) “You are not listening to me, you are not attending. I am talking and you are doing something else”...you may find that I am here talking and the child is not noticing me, but that child is not thinking like big children.

The other thirteen teachers, while acknowledging that in the primary and infant settings under-fives may be treated like the older children, were not asking for these kind of changes. They argued that under-fives were capable of standing quietly at prayers and could learn a lot while playing with the older
age group. For example, Wendy from a primary school noted that her class of
under-fives was admired when they went to assembly and was as quiet as the
other children. These teachers were, however, asking for flexibility in the
process of implementing their programmes. These teachers contended that
they often met criticisms and objections when they return to their classrooms
after training to implement practices. All of the teachers called for greater
empowerment for themselves in the process of utilising practices they
construed as needed in the classrooms with under-fives. Doreen summarised
the views held by the majority of the teachers on the notion of flexibility in
their classrooms. She said:

I feel that I am capable of running my own classroom. I do not feel
that there should be anybody that should come and tell me what to do
or how to do it. Suppose I was teaching a lesson, I do not feel it should
come to he point where somebody would have to tell me how to do it.
I think I should know exactly what I am about.

The teachers argued that as professionals they should be trusted to implement
practices to which they were exposed either from training or observation.

Trained teachers

Another condition raised by all teachers was the need to have trained
teachers in place before under-fives were accepted in schools. They all agreed
that these teachers should be specifically trained in ECE. Eleven of the
teachers noted the policy of schools accepting under-fives and then untrained
teachers who never taught this age group reporting to the classroom to teach
them. Carmen, who was teaching at a primary school, described such a
situation, basing her description from her years of teaching in the infants. She
said:
You will hear a teacher is coming for the nursery and then the teacher who comes never taught those children before. Now, that teacher has to be trained (on the job) to deal with those nursery children.

Other teachers stressed the importance of remembering that under-fives were the foundation in the education system and needed to be treated differently from other children. They argued that when an untrained teacher was left with under-fives then they were often exposed to practices that were not suitable for the age group. Veronica, the untrained teacher in the study, also raised this concern of the harm that could be done to under-fives. She said “I am learning on the job and I am trying, but at the same time I may have shortcomings in my trying. And I look at it that my shortcomings maybe detrimental to a child”.

The teachers noted the importance of nursery education and construed this stage in the education of the child, as the foundation on which all else will be built.

Provisions of essential facilities

The teachers argued that the use of the practices with under-fives demanded a certain kind of classroom environment. They felt that the facilities in the schools should cater to the kind of learning environment that supplemented the home while preparing under-fives for formal education. All the teachers described the setting needed as those that should not be formally set up, but reflecting that they were for young children. The teachers called for a setting that was summarised by Mary as “bright, gay, colourful, lots of colour around, lots of concrete materials there for the children to use, lots of charts and things on the wall from which the children can learn”. They noted
that in such an environment, under-fives should have freedom of movement and the freedom of selecting materials. This means they added that the space and appropriate materials needed to be in place before under-fives were admitted to the schools.

The teachers in the rural schools highlighted the problem of a reduction in the number of five year olds entering these schools, and argued that when the eleven year olds left for secondary schools there was often a short fall in terms of the expected roll of the school. As a result, they expressed concerns that under-fives were being admitted to primary schools “to make up numbers”, despite the lack of adequate facilities to cater to their needs. In the other primary schools the teachers also highlighted a problem with the lack of the essentials facilities for under-fives. They all argued that under-fives were accepted first and then ongoing attempts were made to develop the nursery. The concerns for this practice of acceptance without preparation were highlighted by a number of teachers from the rural primary schools. For example, Carmen said:

Do not take children and then expect to develop the nursery! Because that is what is happening...if they are going to have a nursery section, have everything in place so that when they (under-fives) come, they know exactly what we are about. Do not have them, then we start fidgeting, ...because that was where I found myself at the beginning of this term. I was told we had nursery classes and nothing was put in place to deal with nursery classes.

Veronica contended that:

If your school is going to accept three and four year olds, I think it must be equipped. I cannot write without chalk! I cannot paint without a paintbrush! If the school is equipped for all areas of learning and development for these young children, yes, you can take them. If it is not, you are doing the child an injustice...So I think that unless the institution is equipped, properly equipped and I mean from the
classroom to the bathroom, ... our bathrooms are not for nursery here at all. I do not like the idea of three-year-olds using the same bathroom as eleven-year-olds. ... I have been into this bathroom and saw some of the children in my class putting their hands on the seat to climb on. So you see it is at a disadvantage if the school is not properly equipped for the children.

Mertie from a rural school voiced this view:

I personally have no objections to the three year olds being in school providing the physical plant and the necessary facilities are in place, that is, if they are going to cater to the needs of the three and four year olds.

And Brenda also from a rural school explained:

I do think children at this age should not be exposed to a lot of actual teaching. They should be getting opportunity to have materials there to play with, to learn a lot of concepts from. All these should be in place before these children can be brought into school.

In these comments the teachers hinted at the damage they perceived was being done to under-fives when they were taught via methods that did not meet their needs because the infrastructure was not in place before they were admitted to the school. These teachers acknowledged that the Ministry of Education was aware of the problems in the primary schools and felt it was remarkable that the policy of admitting under-fives was made in 1987, and ten years later the primary schools were not properly prepared for them. However, the teachers hastened to point out that this problem did not exist at the nursery schools. As a result, they questioned, and called for the elimination of the inequality of education offered to under-fives in the public school system.

Elimination of disparity between schools

The teachers expressed concern about the perceived disparity between government nursery schools and government primary or infant schools. They felt that the differences between these schools resulted in the use of practices
in the primary and infant schools that did not meet the needs of under-fives.

Eleven of the teachers shared concerns in terms of the more than adequate conditions they felt existed in the nursery schools as opposed to the less than adequate conditions in some of the primary and infant schools. These eleven teachers agreed that the physical conditions between the primary and nursery schools was one of the factors that influenced their choice of practices when working with under-fives. These primary and infant school teachers explained that the nursery schools were used as models and they were encouraged to visit and observe the practices used at these schools. They admitted that they learnt a lot from these visits, especially in the area of the kinds of teaching strategies that can be used with under-fives. However many expressed feelings of despondency when they returned to their classrooms. Ingrid, a nursery school teacher typified the view of the teachers from the primary schools who visited her nursery school.

When people (primary teachers) come in here, they usually come in here like to observe, and they say, "Well, there is no way I can do this! I mean my setting is so different, there is no way I can do this.

The primary teachers themselves expressed dissatisfaction at the disparity between the nursery facilities and the nursery classrooms in primary and infant schools as explained by Diana:

At government nurseries, you see so much material, and they are there for half day. You come into the government public schools and you do not see any. They want us to take children into schools, yet they are not giving us the material whereby you can work... and you cannot work effectively if you do not have the tools to work effectively.

The teachers who highlighted the poor conditions that existed in some of the primary and infant schools shared her view. These teachers argued that
because of the lack of the resources needed to meet the needs of under-fives
they resorted to methods that they believe should not be used with these young
children. As Joan noted, "...at some point in time they (under-fives) get easily
burnt out, and then they behave badly and they do not want to do certain
things, they have been exposed to too much formal work too early"! The
connection between the availability of lots of materials for half day sessions in
nursery schools and the lack of the same for the children who spent the day in
the primary and infant school environment, resulted in the emerging and
discussion of the half day and whole day dilemma.

Dilemma about half day or whole day

The teachers construed the length of the school day an important factor
in terms of the practices used in the given time. The half-day sessions in the
nursery schools were considered limiting in scope in terms of the responses by
under-fives to the afternoon sections. Two of the four nursery school teachers
noted that under-fives in the afternoon sessions were disadvantaged despite the
used of practices that cater to their needs, because of the effects of travelling
to school in the hot afternoon sun. Ingrid explained:

I find that ...they come in the afternoon, and after they walk up that hill
or they come on the bus, they are so sleepy and tired. They come in
and they work...but I do not like that afternoon half. It takes too much
out of them and you do not get as much done. ...Coming in the
afternoon I find that session is not as good as the morning session.
They do not get to do as many things as you would like them to do.
They are so tired and everything. There is a difference, and coming
through that sun in the lunchtime, it is really asking a lot of those little
people...and most of them have to walk.

Angela also explained her problems with the half-day sessions:

To compare the two sessions we have here, I find the afternoon
children do not respond readily to conversation as the morning
children. At times, I do not know if it is like the time of day, but I find that I would have to do a lot of lessons, or use pictures, colourful pictures...a lot of fennel board, that is what I would usually do to get them boost up. ...Sometimes they (parents) smack them, and you have to try and calm them before you can teach. And by the time you done calm them half of the day gone.

On the other hand, two teachers in the primary school hinted at the effect the long day may have on under-fives. Wendy, who taught a full day session at a primary school said:

I do not think that children that age should have to be at school for so long, the whole day! ...In the primary school setting, the children go right through from nine till three and it is a bit much, although they sort of struggle on and in the end they ...come around. Yet, it might be a little hard at first for them.

Brenda agreed with Wendy and noted that at her school she felt that the session should really end at mid day. She also felt that the full day was too long for under-fives. Beside these two teachers the other primary school teachers in the study did not voice any objection to the full day for under-fives. They felt that the afternoon sessions could be used for rest and Free Choice activities. The general feeling was that parents were working and the full day benefited under-fives. Moreover, twelve of the teachers argued under-fives gained a lot more during a full day session than from a half-day session. The general view elicited from the teachers was that the full day should be made available to all under-fives provided that there was an increase in the ratio of teachers to pupils.

Improving the teacher to pupil ratio

The teachers argued that the practices that met the needs of under-fives were more effective in an environment when the number of children to a teacher was reduced. The four teachers from the nursery schools explained
that they had a ratio of approximately twelve pupils to one teacher (with a teacher aide) at their schools for each half-day session. The primary and infant school teachers noted that they taught on average, a ratio of twenty-five under-fives to one teacher (without an aide). These teachers suggested an increase in the ratio of teachers to pupils. They called for a policy in which each teacher was expected to teach no more than fifteen under-fives, with an aide attached to all institutions with under-fives. In addition, ten of the teachers recommended that provision for, and a policy covering, rest time for under-fives needed to be put in place in the schools. They argued that they placed these views on the reactions of under-fives to the classroom practices.

**Considering the children’s responses**

At least eighteen of the teachers indicated that they evaluated the suitability of their teaching by the emotional responses of under-fives often demonstrated by what they said and did. These teachers noted that the level of enjoyment displayed by under-fives during different activities was used to determine if the activities should be used again. Doreen explained what the other teachers also hinted at or described:

Children really enjoy those practical lessons. And sometimes they would say, “Teacher, when will we do so and so again?” So you always find the time and the space and get the equipment to keep the children happy.

Some of the teachers also linked the children's enjoyment to the learning process taking place during the lesson or activities as discussed below.
Enjoyment while learning

Mary, one of the teachers in the 40-49 age group noted that she was concerned not only with the enjoyment involved in the learning process but the knowledge under-fives acquired when the practices were used. She said:

I see this thing as learning and learning through fun. I like to know that my children are having fun but I also like to know that they are learning and that they are being the best that they can be.

Ten other teachers agreed, and their view that under-fives should enjoy their learning experiences at this stage was reflected in the constructs elicited during the repertory grid interviews, for example *Children enjoy/Bored or disruptive, Child enjoys/Child does not enjoy*. The teachers often made reference to these elicited constructs derived from the repertory grid technique in order to highlight the way they perceived the practices with under-fives.

Summary

This section presented the teachers’ construing of the school environment needed for under-fives. They highlighted areas of concerns for under-fives in schools and they explained some conditions for acceptance of under-fives in the primary and infants settings. These included having a flexible programme that allow them to implement their ideas, ensuring that all teachers were trained in early childhood education, providing appropriate facilities, eliminating the inequality between nursery and primary/infant schools, and making a decision concerning half or whole day. They also contended that there was a need to reduce the pupils to teacher ratio in primary and infant schools. They explained that indications of the success of
any practice were the children's emotional responses such as showing enjoyment while learning. The teachers indicated the need for practices that catered for the total development of under-fives. These include Child Initiated, Integrated Approach, Child Centred, Informal, Free Choice, Teacher Directed, Individually, Small Groups, Real Life and Concrete approaches.

Summary of Consideration of the child

This section presented the teachers' personal practical knowledge about the way that the pedagogic practices relate to under-fives in school settings. The major sub-themes identified included Perceptions of the under-fives, the Home environment from which under-fives come and the School environment. In construing under-fives from these three perspectives the teachers explained the constraining and enabling factors they perceived as influencing the practices.

Overall, the teachers perceptions of under-fives as babies, little people, free, soft child, pliable, waiting to be moulded, blank slates or knowing little, resulted in the recommendation of practices that cater to their needs and development. Most teachers argued that each child was an individual and all children learn at different rates, which meant they should be actively involved in their own learning. The teachers also suggested that given the short attention span of under-fives they should be taught via practices that allowed them to talk, ask questions and move freely around the classroom. The major goals they envisaged for this age group included cultivating in each child a special love for school, developing their self-confidence, independence,
creativity and a sense of responsibility. The teachers concluded that these goals were achievable when the practices catered to the total development of the child, the physical, social, emotional and cognitive. The general consensus among the teachers was that the goals they outlined for under-fives were best achieved via practices that mainly focused on the child.

In their construing of the home environments of under-fives the general consensus among the teachers that there was a perceived lack of developmental experiences in some homes. The shortcomings of some homes were set against a background where most parents were perceived as having to work and under-fives left with irresponsible relatives and no educational materials. They argued that parents often made an alternative arrangement for under-fives, whether it is at private or government schools. The teachers argued that some private schools focused on academic work and employed untrained teachers. They however highlighted the benefits to be derived from an early start at government schools, these included interactions among under-fives and a competent adult in the classroom setting, early socialisation to school, development of language, an easier transition to formal school and early exposure to materials. The teachers felt that the pedagogic practices chosen had to be those that linked the home and school, and most importantly, catered to the total development of under-fives.

The teachers construed the practices in terms of the school environment they envisaged for under-fives. They generally agreed that since under-fives were in school then the necessary infrastructure should be in place before they entered school. They identified a number of conditions for
effective implementation of the practices. These included having a flexible programme, trained teachers, appropriate facilities, equality between nursery and primary/infant schools, implementing whole day sessions for all under-fives, and a reduction in the number of pupils to a teacher. The teachers also construed the practices in terms of the children responses and the enjoyment they perceived under-fives to be having while learning, as indicators that the practices should be used again. The general consensus among the teachers was that practices that catered for the total development of under-fives, for example *Child Initiated, Integrated Approach, Child Centred, Informal, Free Choice, Teacher Directed, Individually, Small Groups, Real Life and Concrete* approaches, were needed. They also felt that those construed as focussing on cognitive development were also needed in developing emotional and cognitive development. These include *Whole Groups, Formal, and Academic Focus.*
Benefits to Under-fives

This section details the teachers' personal practical knowledge concerning the benefits of the practices to under-fives. Within this large theme, seven sub themes emerged (Table 14) as a result of the analysis process. These include Monitoring the child’s progress; Development of language; Development of learning experiences; Limitations on learning experiences; Focussing on the child’s interest and creativity; Developing initiative and independence; Developing self-confidence and enjoyment; Catering for the all-round development of under-fives; and Providing realistic experience. The teachers' comments about these sub themes are discussed in the following sections.

Construing of the individual elements have already been reported on in Chapter Seven, but in some instances below, for example in the section "Monitoring the child’s progress", there are more references to the way the practices were construed. Opting to place this data here rather than in Chapter Seven allowed for establishing and developing other themes, which give another window on the teachers' knowledge about the practices. It also provided richer description and understanding of the use of the practices with under-fives from other perspectives.

Monitoring the child’s progress

Ten of the seventeen teachers who construed their liking for a Child Centred approach argued that it helped in terms of highlighting the child’s progress, development and interest. Iris summed up the view expressed by these teachers:
The *Child Centred* approach, I like this one because you can really find out how the child is progressing. Through the child’s work you can find out how the child is thinking about himself/herself or if the child might be inclined to this particular task than others.

Twenty of the teachers from primary, nursery and infants schools expressed the view that under-fives should be taught *individually* whenever possible.

Audrey highlighted the need for the teacher to have an individual focus in terms of catering to development of the “whole child”. She said:

> Now teaching in the three to five age group should cater to individual needs of the children. Remember we are developing the whole child so we should try to find out their needs, their emotional, intellectual and social needs and try to cater for them as much as we can.

Audrey noted that the practice of teaching *individually* allowed the teacher to identify any problems under-fives might be facing. She explained,

> As a teacher interacts with each child that is the only way he or she can find out the child’s limitation or ability, whether it is language or it is experimental, hence the need for that individual attention.

Iris shared similar construing and explained why teaching *individually* was needed. She said, “It can be very useful to the development of the three year old...because it can bring out the individuality of the child. You can see the child working as an individual and how the child thinks and responds to the particular topic”.

Deborah also described teaching *individually*, as necessary, since it allowed for the teacher to “spend the extra minute or so with the individual child to help them to understand the concept that is being taught”. There was also general consensus among sixteen of the twenty teachers, that each child was an individual and that the child should not loose its individuality within the class. These teachers felt that the practice teaching *individually* was crucial in
maintaining the individual status in the classroom. To argue this point, two teachers expressed their views on the importance of developing each individual. They suggested that the focus on the individual was an important part of teaching. Each child, they argued, was different and the teacher should not aim to make them all think alike. For example Veronica who said:

I cannot approach a class and teach a class without knowing what is in each child’s mind. I cannot take twenty children and try to mould them into one thought it is impossible. We are all different humans. We have different needs, and I try, to appeal to each child on a more or less a personal level, know what is in it, and facilitate an environment that they can show me what is in it. Even if they are negative things I am seeing, then I can correct it. If I do not know what is in it I am of no use, I am not teaching anything!

Ruby shared this similar view, she said “I still think that each child is an individual. And I think that being in a class you should not loose your individuality. Within the class each child should remain as he is”.

Angela noted another benefit to under-fives, she said “When you work on the one to one Individually, you find that the children’s response is better”. Deborah explained why she felt the children needed to be taught Individually. She said, “The children needed to be taught on an individual basis since they are very young and all of them would not be able to go at the same rate, because they developed at different rates”.

Carmen, from a rural school, noted that because the children were in Small Groups, the teacher could “pick up any little problems that the child might be experiencing at the time or might have experienced”. She explained:

If you are in a small group or on a one to one that child might come out and say, “please teacher I do not understand, or I cannot understand
after this point, I am stuck here'. And you go through with them (sic), and then they say 'please ma'am I understand now'. They have a sense of gratification that they have achieved something, it helps them to achieve.

Angela gave an example of the way the practice catered to the individual. She said:

I believe in grouping, because when you group you have more time to spend with individuals on a one-to-one basis. And we know that all children do not respond the same way. All children would not grasp things the same way. But in a small group session you will get more out of a child, like teacher related, teacher and pupil reaction.

Three teachers also highlighted the opportunities Small Groups provided in terms of focussing on individual development and personalities. Monica summarised their views when she said:

Working in Small Groups provides the children with opportunities for social graces. The children learn to share, they learn to help one another if there is a problem and they also express love in these groups. Sometimes in these Small Groups too, the qualities to leadership comes out. Somebody wants to be boss or there is always somebody who has the quality of being a leader.

Maureen's statement described the thinking expressed by some of the teacher in terms of deciding who needed to have individual attention in the classroom. She felt that the teachers should initially use Small Group to identify the children who needed help. She described the help that the under-five might need:

Well I might have to repeat something for this child, or I might have to let this child go back and do that again. For example, in fixing puzzles, there might be a child who is given a puzzle to fix but did not complete the task. So the teacher might make a note of that and let the child go back another time and work at it again.

Ruby described the use of the practice in terms of catering to the needs of the "bright" and the "slow child". She said
Sometimes too you have a bright child who could get bored when the others are not finished. He finishes so quickly you still have to cater for him; you still have to have something extra for him to do.... You can handle it if the child is very bright, or the child is very slow. Those individuals can get attention.

Some practices were identified as allowing the child to move at his or her own pace by catering for individual levels of attainment, thereby monitoring progress. Carmen gave an example of the way attainment could be catered for in a Child Centred classroom:

You might be doing addition with the whole class and a child might have passed that stage.... It does not interest that child... So you go and find something that he is interested in or an area that he can cover and put him or her to work in that area there.

Twelve argued that with other practices, such as a Formal and Academic Focus, the child was often forgotten as the teacher got trapped into covering the syllabus. The majors looser in these situations, they explained, were under-fives. Carmen explained:

This thing about introducing concepts when the children are ready, for some teachers is very hard to fit in there. Because remember, you are expected to follow your syllabus and your syllabus has ‘X, Y’ expectations for the children. A lot of times you fall into the trap of trying to teach what is expected of you and not when the child is ready. And then again also some children are never ready.

Ruby maintained that using a Child Centred approach enable the teachers to discover the ones who were not ready, and to proceed with the task of making them “ready for the next aspect you are doing”. She felt that teachers often had “different expectations, or mind sets for the children,” that is, they think “he is five he should be doing such a thing by now”. She further explained that some children did not always live up to these expectations, and this meant that they did not always benefit. Ruby argued also that sometimes under-fives
“missed basic knowledge” and the teacher who used a Child Centred approach identified the problem and sometimes went “back and see if the child was ready or had the foundation for the new concept” before they went on.

Ten teachers, who described the Small Groups as a follow-up to Whole Group approach to teaching, noted that Small Groups helped the teacher reach each individual in the class and allowing for individual attainment. Brenda described the use of Small Groups approach as a secondary method of instruction:

There are times when Small Groups would have its part because it is sometimes impossible for a teacher, taking the number of children he or she has to teach into consideration, to implement a lesson just as a Whole Group. Small Groups would have to be used after to make sure that each child understands what is being done.

The other teachers agreed and described Small Groups as the approach they used for focussing on monitoring progress and clarifying problems. These teachers said they considered Small Groups as very crucial in the teaching of under-fives. They believed the practice could be beneficial to the child and to the teacher. Mary epitomised up the benefits as described by the teachers:

You cannot get away from the Small Groups, they are very important. That is the time when you get over your concepts. They may have missed something during the pre-activity and they may have missed something during the Whole Group session. That is the time when you get in there with your small number of children. That is the time when you have a one on one, when you zero in on individual differences. That is the time when you find out what a child knows from what a child does not know and that kind of thing. You have a chance to clarify the conceptions.

The majority of the teachers described the practice as one of the methods that could be used to gauge how the individual child was developing
in terms of identifying the child’s weaknesses and strengths, acquisition of
knowledge and skills, and hence level of attainment.

Most of the teachers felt that when the Small Groups approach was
used, it became easier to identify and work with the child who was weak and
needing assistance. As a result, they felt that remedial help could then be
provided for the children who needed it while those who did not could be
allowed to work in other groups and on other activities. Maureen explained
how the individual child could be helped through the use of Small Groups:

You might have to go into small group teaching and in this way the
teacher can see which child needs more assistance than others. The
teacher would determine, well I might have to repeat something for
this child or I might have to let this child go back and do that again.
Like for example, in fixing puzzles, there might be a child who is
given a puzzle to fix but did not complete the task. So the teacher
might make a note of that and let that child go back another time and
work at it again.

Deborah agreed and noted that the practice allowed for the teacher to be “able
to analyse each child’s strengths and each child’s weaknesses and provide
necessary follow up activities and necessary guidance to help each child as an
individual”. Ingrid described the Small Groups approach as “best for the
teacher as well as for under-fives. She explained “The teacher can more
discuss, more be in contact with each individual in that group and these
children can learn to play interactively a little quicker than normal”.

Nineteen of the twenty-one teachers also expressed concerns about the
long term effects on the “weak” or “dull” under-fives who were overlooked in
the classrooms. The teachers described the weak or dull child as one who for
varying reasons was not working at the level of the class.
Gloria gave an example of her thinking in terms of labelling of a child weak or dull: "There is one child in my class, ...she is not as quick as the other". Gloria and other teachers emphasised the importance of Small Groups in catering to the needs of the individual children who were not working at the level or pace of the class. Ruby explained how she used Small Groups with children who she considered as working behind the others:

I have to create smaller groups within big groups. The children that are behind the other children always worry me. I always worry that if they do not get it down here, what is going to happen up there! So whenever I am teaching I always pick out the ones that are not doing well. The ones that are bright and can go along, I always let them go on. The ones that are not doing well I always have to take them out and bring them to me... because if I do not do it, the year’s knowledge is going to go and they are not going to get it... I pick out the weak ones and we work in groups.

The other teachers expressed similar worries and a similar strategy noting that they too focused on the weak children in the class and aimed to teach them individually within Small Groups. Five of the teachers noted that because they knew that the “bright” or “smart” child would learn under any circumstance, they focused their attention on the slow child. They said they did this knowing that the smart child would be reached while catering for the needs of the “weak” children in the classroom. For example, Gloria, from a primary school, explained how she catered to the varying abilities in her class. She said:

I focus mainly on the dull child than the bright one cause they will learn so long as I present the material they will get it and you know if I present the material clearly and in a logical manner they will get it. But the dull child sometimes you go straight with the logical and they still don’t get it.
Fourteen teachers expressed concerns about the use of practices that focused mainly on the cognitive development of the child, for example practices such as Abstract Materials, Formal and Whole Group approach. These teachers described major problems such as the neglect of the “slow” child in the class as the teacher focused on the more outspoken children. For example Mertie argued that the individuals could be neglected within the class. She explained:

When we have large groups to work with at this age you find children who are quick to answer or to speak and can work at a faster rate than the others. We find that ones that are a bit slow, sometimes they are left behind.

In addition Deborah noted the “difficulty in getting around to each child and observing the strengths and weaknesses”. She said she believed for example that a Whole Group approach was not appropriate for use with under-fives since it did not benefit the child or the teacher. She explained:

There are limitations, in that when you teach as a Whole Group there are children who do not benefit. The brighter ones, they will benefit, the slower ones will not benefit at all, and the average ones, they will just be tagging along more or less. So the Whole Group, I believe, should be avoided. When Whole Groups are used, I believe a lot of information is lost to the children and to the teacher. The teacher is not aware of how the children are benefiting, if they are benefiting. The weaknesses and strengths will be more difficult to be diagnosed, if they are diagnosed at all.

She argued that Whole Group in a Formal environment should be avoided and replaced by the use of Small Groups and Individually focussing on under-fives.

Doreen too voiced similar concerns about the use a Whole Group approach noting that she accepted that it was not always beneficial to some of the children. She explained:
It is not always beneficial to use the *Whole Group* approach since each person is at a different level and each person is at their own level, and maybe the brighter ones will excel using the *Whole Group* method and the slower ones would be left behind.

Furthermore, Monica maintained that the children were less responsive in *Whole Group* teaching. She said:

*Whole Group* teaching resulted in less responsive children than in *Small Groups*... Some children get up to mischievous acts, they do other things other than listen.... Some children learn and some children do not learn because some children tend to make the others inattentive.

Audrey also shared her concerns for the development of under-fives in the *Whole Group* setting. She explained:

*Whole Group* sessions rob children of their individual development, and as a teacher concentrates just on what she has to put over, there is hardly room left for the child to interact or share his ideas or to share his feelings about whatever is being said or done.

Additionally, Veronica explained that a *Whole Group* approach with a mixed age group could cause a very young child to skip stages in order to keep pace with the rest of the class. She described this situation:

It may be the child in my class that is relatively mature but very young, and when the others are writing she wants a book and she thinks now everybody has a book and she wants a book. But she now has to go through all the stages of colouring and lacing and cutting and tearing to develop the hands, and that may lead her now to go home, get a book and start trying to, you know, and she would be missing out on a step.

The *Whole Group* sessions were also viewed by one of the teachers as depriving under-fives of the opportunity to produce finished products and resulting in a lack of praise and satisfaction. Audrey noted that within a *Whole Group* approach the child’s peers or the teacher was not given the opportunity to offer praise and boost the child’s self esteem. She explained the importance of praise, “When a child completes a puzzle and the teacher says ‘very good,
you fixed the puzzle’ or a friend comes over and praised it for what it has done, that helps develop a child’s self esteem”.

Maureen further explained that the practice reflected life where every individual was a part of the whole group. She noted however that under-fives needed greater interaction than they would experience in a Whole Group approach and suggested that its use should be restricted. She explained:

In teaching, Whole Group classes in day nursery, it does have its place. It can be used at times in certain subject areas. It saves some time like in lessons such as Social Studies, Language Arts where you can have everybody come together for that lesson.

The other teachers agreed and argued that practices such as Whole Group teaching should be restricted to certain subject areas. They suggested that the practice be reserved for areas such as Social Studies, Health Education, Religious Education, and Science.

In addition five of the teachers highlighted the benefits of a Whole Group approach to under-fives. Joan confirmed that she believed the practice helped the teacher to understand the child in a wider setting. She noted that in the Whole Group approach where there was the sharing of ideas the teacher discovered how the children were thinking and was able to confirm or correct their ideas.

Lucille too acknowledged that she thought the practice was very important in the teaching of under-fives. She argued however that the Whole Groups should “not be very large, fifteen to one at the most”. She noted that if under-fives were taught in this kind of Whole Group setting then they were being prepared for the next class, reception, where they will be required to work in bigger groups and sit quietly for longer periods.
Sonia defended the use of *Whole Group* by noting its usefulness in areas where 'rote learning' was needed. She explained that in a situation where the children were learning by rote, for example through drills and choral speaking, she had observed that they learned from each other. She felt that *Whole Group* would be suitable for this type of memorisation. The areas she identified as those that for which rote learning can be used included Poetry, Dramatisation, Singing, and Story telling. Sonia said she noticed that these areas comprised of “activities that most children in this age group loved and they showed interest during the lesson”. She said she recommended *Whole Group* as a means of teaching these areas since the children could interact and observe each other, and give help and encouragement when needed.

Veronica also said she believed that children learn from each other within a *Whole Group* approach. She described her experience with under-fives of varying ages and abilities working together and learning from each other through a *Whole Group* approach. She said:

*When I come to the *Whole Group* session, which I have to find myself doing a lot of, I try to do it like mostly oral. I mean I would have vocabulary now from the wee nursery, to the more intelligent child. It has its advantage in that children learn a lot from each other. So when the older child now gets up and says something, the little one, the nursery ones, they can pick up and learn something.*

Gloria confirmed that she felt the practice could be used in the education of under-fives. She explained that even within a *Whole Group* approach it was possible to cater to the needs of the individual child when careful planning and organisation were used. She illustrated this point with a classroom experience:
Even in *Whole Group* lessons although you might think it is crowded, especially during music periods, we let them sit down, spaced out, so they can clap, they can get up and dance if they want to, whatever. For story telling, when they go for story telling, each person take their own mat, they sit on the floor crossed leg and circle, sometimes I sit on the floor with them and read them the story.

Gloria further explained that catering to the individual in a *Whole Group* approach involved allowing under-fives free movement and free choice of what they wanted to do during a lesson, from the options available. She explained:

> So even in that, although it is a whole big group, we still try to give them some individual feeling, so that they can move. They do not have to sit there rigid and do not move. We still allow them some kind of movement, for it is really hard for those children to sit there for long periods of time and do not move, very tough. We allow them to move around.

She said she felt that the practice did encourage under-fives to express themselves and encouraged them to learn from each other.

Monitoring the child's progress was therefore achieved by implementing practices such as teaching *Individually*, and using *Small Groups* and *Whole Groups* with under-fives.

**Development of language**

Fifteen teachers noted the development of language and learning experiences from the use of practices that focus on the total development of under-fives, for example *Child Centred*, and *Child Initiated* approaches. For example Lucille said “So much language comes out, so much learning experience comes out of this *Child Centred* approach”.

These teachers argued the need for practices that aided in an early identification of problem areas in language and learning development. Angela
epitomised the views shared by these teachers on the use of a *Child Centred* approach to prepare and gauge the language development of the under-five for the next level of schooling. She remarked:

> When a child comes to a nursery school you would have to look at the development of speech, you are looking at the difference, the left and right orientation for writing. You are also looking at how the child will respond in a classroom setting because I think that this setting really gears a child towards the primary school sessions.

The teachers argued too that a *Child Initiated* approach helped the teacher to develop language and learning experiences. Joan described how she used a *Child Initiated* approach in a project done with under-fives. She spoke of under-fives initiating discussions and using language and the teachers eliciting, guiding, clarifying and widening the children' vocabulary and experiences. She explained:

> We threw out things to them and they answered back, and we found them saying a lot of things that we did not expect. You had a part where somebody was saying something about a horse nursing and then all of us though, have we ever seen a horse nursing? Does a horse nurse? So that was our homework, and we did find out that horses nurse, except that we do not see them on the farm. So we do not see them nursing like you would a cow.

Thirteen other teachers also noted the unique ideas and information that emerge as under-fives initiated and developed discussions with the teacher. One of them, Gloria, from a rural school, spoke of under-fives giving her “ideas that she would never have though of”. Diana, from a rural school, argued that the practice allowed the teacher to “focus on what was important to under-fives, draw this information from under-fives and make plans for the inclusion of the child’s interest in the classroom”. She further argued that when as teachers “we teach under-fives”, we should think in terms of “what we
want from the child, thinking of the child and the things the child should do...and what is good and or best for the child”’. These teachers felt that allowing for self-expression among under-fives provided teachers with the opportunities to build on the language and learning experiences of under-fives, taking them from the known to the unknown.

The benefits of focussing on what was drawn from the child was also highlighted by five other teachers who noted that the teacher also benefited from the insights gained from the way under-fives were thinking. Audrey argued that with the information gained the teachers would be able to “clarify, discuss or reinforce information” held by under-fives. Joan agreed and gave an example of her experience with the thinking of under-fives:

The things the children said ‘milk comes from the supermarket’ things like that, we found out then their understanding of their environment and of the topic as well. And it was all Child Initiated, it came from them and we worked from there.

These teachers contended that because a Child Initiated approach allowed the child freedom of expression, teachers were able to listen, clarify and increase the knowledge held by under-fives in early childhood settings.

Free Choice was also construed by eight of the teachers as aiding in the development of language and learning experiences among under-fives as they move around the classroom and work in the centres of interest. They views were typified by Mertie who argued that the children in these sessions were given the opportunity to “discuss things of interest to them” which “also helped to encourage oral communication, self expression and it would also help them to be assured of themselves”. Ingrid, from a nursery school, contended that
under-fives in *Free Choice* sessions were given the opportunity “to relate to other little children...who they can work with, who they can converse with”.

Some teachers highlighted the way an *Informal* approach aided in the development of language. Diana noted that an *Informal* approach helped them “to be free to be able to say anything to me or tell me anything”. Mertie identified some of the ways in which the child's language developed in an *Informal* approach. She said:

> If we create *Informal* settings for those children...it would also help to encourage communication, oral communication, self expression, and it would also help them to be assured of themselves because again they are talking about things that interest them.

The development of the children’s language abilities through an *Informal* approach to teaching was also highlighted by other teachers. Ruby noted that in an *Informal* approach the “child tended to talk more and interact with the teacher more”. She felt that under-fives had no difficulty in talking in such a setting. She explained the importance of communicating and the way an *Informal* approach encouraged free oral expression from under-fives. She said:

> I like children that talk in the classroom. I do not like children to sit down quietly. I like children to come and tell me things and asked me questions, asking me ‘Why do this and why we doing this?’ I like children that talk. I find that when it is an *Informal* setting you get the children to talk easier. It is easier for them to talk and tell you whatever they want. So I prefer the *Informal* setting.

Ingrid also described the *Informal* approach as “good” not only in terms of allowing the children freedom of expression but in enabling the teacher to gain information about the children. She explained:

> Children who are not usually talkers if you listen to them in the *Informal* setting they are freer and you usually get so much what you
will call, information about these children. You get to know their likes and their dislikes just from this Informal setting.

Two teachers also construed the benefits of Abstract Material to under-fives in terms of their language development. Joan explained that she knew that “a child cannot understand the abstract very well”. She felt however that Abstract Material could still be used to aid the child in understanding other things especially if the Abstract Material was drawn from the child. She said “But these kinds of (abstract) materials can be brought in to work with the child, to help the child understand other things”. She said she felt that "Abstract Material... comes from the child. All these things are what you would associate with a child and how the child works". In her explanation of what she meant by Abstract Material “comes from the child” she noted that they were the ideas that children had in their heads. She contented that if teachers allowed them to express their thought then they (teachers) can use the children’s abstract ideas as an aid to explaining other things, while encouraging the child to develop language.

Sheila on the other hand construed Abstract Material from the point of view of the teacher. Sheila explained that when Abstract Material was used the teacher was often the person presenting and this allowed for the hearing of language used by the teacher. She said she felt that “the teacher should have a hand in directing the children” and in so doing he or she will be catering to the needs of the children. She added however, that presenting the children with Abstract Material was not the best since these young children needed materials, which they “should be able to touch and feel and look at instead of just sitting static in the class and listening to the teacher”.
Development of learning experiences

Seventeen teachers noted the various ways in which practices focussing on the total development of under-fives aided in the development of learning experiences. They expressed the view that under-fives were at the stage in their development when they needed to see, touch and manipulate objects in the classroom. For example, Monica said, “Children need to see, touch and manipulate things”. Iris noted that “Children in this particular age group learn through the senses...because of that the teacher has to provide materials that the child can see, touch and handle and manipulate”. Ingrid also noted that under-fives in an Informal approach also showed greater independence while learning. She explained “you get so much more, they do so much more for themselves, really. They learn so much more”. Deborah maintained that she believed that an Informal approach had a place in the education of “these young children”. She argued that the approach benefited under-fives because “they tend to be more relaxed, they share their views freer, and there is greater participation when there is Informal teaching”. She further argued that when “Concrete materials and Real Life Objects” were provided within an Informal approach “it helped the children to grasp the concepts” that were being taught.

Angela was among the seven teachers who argued that the use of Concrete materials meant that under-fives could have learning experiences that resulted in more interesting and challenging lessons and creating a lasting effect on the children’s minds. Angela explained:

Sometimes a child brings in something that you never even thought about in your lesson and when the child brings it up, you could zero
into that particular area or particular thing... so as to get more or to add in more to that child’s knowledge.

Carmen said “Concrete materials help the children to understand concepts better so long as they can touch these things, actually see, they are able to conceptualise them better”. Lucille felt it was more “meaningful” to under-fives than talking in the abstract. She too noted that based on her experience, lessons were more successful and under-fives responded better when Concrete material and objects were used during lesson presentation. Audrey too posited the view that under-fives “cannot think in abstractions” and they needed to be allowed to interact with the environment as they “learn through their senses.” She concluded that the use of Concrete materials aided in “developing several concepts, several skills” while ensuring that under-fives were “gaining knowledge”.

Mertie argued the ways in which Concrete materials stimulated the “interest,” “discussion” and “learning” of under-fives. She explained that instead of “just talking to them about things that they might not even, probably have never seen,” they should be provided with “hands on experiences” that is, “seeing, touching and feeling of Concrete objects or materials.” She too felt that these experiences resulted in “a lot of learning...and long lasting effects on under-fives”.

Deborah summed up the use of Concrete material this way:

When Concrete material is provided it helped the children to grasp the concepts that are being taught. Also at that tender age the Concrete material make a greater impression on their mind, a lasting impression. They can manipulate these materials, they can see exactly what you are trying to teach them rather than trying to process it in their brains in an abstract manner. They can handle and they learn by touching, they love to touch material and they are able to use them, pound them, push th:m
together, pull them apart and it helps them to understand the concepts that are being taught.

Twelve of the teachers contended that exposure to *Real Life Objects* provided learning experiences that help the child to develop physically, socially, emotionally and intellectually. Ruby shared this experience from one of her lessons in which under-fives were exposed to *Real Life Objects*.

We were doing fruits this term and we went down by the mango tree. The children enjoyed that. And luckily for us there were two mango trees and one had on blossoms. And the children talked and talked and they knew about blossoms and they know (sic) that after the blossoms gone the mangoes will come. And they told me that where the mangoes grow on the tree they hang down by this long string. They call it a string. And it was better than me having a picture of a mango tree. And they could tell me that the mango tree has lots of leaves. They really talked that morning down by the mango tree. They talked forever more, and they really had good ideas. You could not believe those three and four year olds had these ideas.

She contended that when the teacher used "the real stuff" the children “learn easier and faster” and life for the teacher was made easier. Brenda maintained that “wherever possible, *Real Life Objects* should be used and it should not be taken for granted that the child might know the particular thing”. She too agreed that when the child experienced the “real thing” then there was a greater chance that he or she “would remember more than just the teacher talking to the particular child about the thing”.

Joan said she felt justified in using an *Informal* approach in terms of the setting and the free discussion because she felt that “a child is very seldom formal on its own”. She expressed the view that an *Informal* approach was “associated with a child and how the child works”. Mertie argued that because of the advantages such an approach presented to the development of the language of under-fives, she felt “strongly that such opportunities should be
given to children to be free in expressing themselves in whatever topic or subject areas that they want to do so. She maintained that the "teachers should provide the appropriate opportunities to encourage this".

Brenda too acknowledged the frequent and satisfactory use of an Informal approach, even when it meant that the teacher changed the direction of the lesson planned for that period. She explained "We find that lots of teaching is informal during the three to five age group because sometimes the environment the child experiences may direct the particular way the teacher wants to plan a lesson for that day". In expressing her satisfaction with the use of an Informal approach Brenda further argued that it was not always possible to "sit down and have a child sitting at a table or a desk to conduct a lesson". She felt that sometimes the child learnt and remembered well when the teacher had "Informal sessions where they... can move around, they can talk and interact with each other.

Maureen also described an Informal approach as catering for the children's natural curiosity and their desire to find out information. She felt that an Informal approach and a Child Initiated approach went "hand in hand" since they allowed for the child to ask questions and discover things for themselves. She gave an example:

So a child might just ask a question and the teacher might think that by answering this question I should not only answer to the child who asked but if I let everybody hear the answer it might help them in some way. A child may ask about the rain and the teacher might just get the class together and a lesson can come out of that, having not planned for it but a lesson can come out that way.
Mary recommended learning mainly through an Informal approach. She expressed her satisfaction with the level of learning she felt was taking place at the school. She explained it in this way:

You would notice we do not have a chalkboard or anything like that here and yet the children learn. The children learn quite a lot and by the time they have spent a year here, and by the time they are ready to leave these children have learnt so much. Some parents tell you that they cannot believe that these children have gained so much for the time that they have been there. So this is very important.

Seven teachers also expressed views about the impact they perceived as resulting from the use of Real Life Objects on the memory. The benefits posited by these teachers included "developing their compositions and how they think, developing a higher level of interest and awareness of what was happening around them and preparing them for the future. Mertie shared the view that the use of Real Life Objects had "long lasting effects" but she also highlighted the immediate benefits, which included helping to "stimulate interest, stimulate discussion and stimulate learning".

Sonia summarised the views expressed by the other teachers when she said:

Children remember most of what they see, that is why real life experiences are recommended for the smaller child. The child is able to see touch, feel and are actually involved in the setting. For instance, if you take the children to the zoo they remember what a zebra or giraffe looks like. They remember more of what they see and what they do therefore it is beneficial to take them out on nature walks and educational tours. Although they remember quite a bit of what they hear, they remember better when they participate and are involved in the particular activity.

Limitations on learning experiences

The teachers further argued that in Whole Group, Formal settings Abstract Materials are often used. They argued that the use of this practice
was a reflection of the syllabus and there were times when it had to be employed, but when utilised, it should be done sparingly. Sixteen of the twenty-one teachers expressed the view that the young age and characteristics of under-fives meant that they were not capable of thinking in the abstract.

Wendy explained her views:

*Abstract Material* to me is not the best way of teaching these young children. Although there are certain things that would have to be in the abstract yet generally speaking I think that there should not be so much *Abstract Material.*

Mary contended that "Concrete" materials should be used whenever possible and when the *Abstract Material* was used, all efforts should be made to provide some *Concrete* example. She put it this way:

There may be times when it might come in, but I believe then that it should be aided with some sort of *Concrete* material. Even if it cannot be done at that time, at a later day you can come back and bring something that the children can really see or touch, to make what you have said more meaningful to them.

Mary said:

I believe *Abstract Material* for children in the early childhood setting is not very meaningful. The reason why I say that is because these children have very inquiring minds at this stage and they want to learn through *Concrete* material. They want to be actually touching things. They are curious and I believe the more meaningful the programme is for them, the more they are provided with *Concrete* material, things that they can actually touch, things that they can manipulate.

Maureen expressed her objection not only because of the age but because they were unfamiliar with their surroundings. She explained:

I do not believe in this *Abstract Material* for three to four year olds seeing that they are not familiar with many things around them. I think at this stage they need to get familiar with whatever is around them. So it is best to have *Real Life Objects,* let them see, let them feel, let them touch, explore, find out.
Doreen noted her objection, grounding it in a perceived lack of knowledge by under-fives in terms of the things around them. She posited this view: “In using *Abstract Material* it is not always possible to assume that each person knows what he or she is talking about because some children are not aware of certain things that are around them”. She too concluded that it was important for teachers to have “a picture or some sort of object” to represent what they were talking about and what was to be taught.

Audrey also voiced her objection on the use of *Abstract Material* in the three to five age group. She said:

*If children are not actually involved in their learning, if they do not experience a sense of fulfilment, a sense of accomplishing a task, a sense of reward and praise, they will not develop positive self-esteem. The *Abstract Material* could lend ... to developing low self-esteem. So *Abstract Material* should not be used in the three to five age group.*

Carmen explained why she construed the practice negatively. She said:

*Children at nursery level, I do not think too much *Abstract Material* would be of interest to them because their minds are not yet developed to think about things out there. Do not tell them about the world because they do not know. They do not even have an idea of where their village is, far less to carry them that far.*

She too explained the need for teachers to expose under-fives to *Concrete* materials around them. Monica argued that since young children could not “see the relationship in *Abstract Material*” it was best suited for an older age group. She said she felt that even when the practice was used with the older children, they still needed be given the opportunity like the younger ones to enhance their memory by having things they could “see and touch”.

The ideas of the practice being more suitable for the older age group was supported by Wendy who explained that she was aware that the practice
was used in the education of under-fives and teachers did so in order to cover
the school curriculum. She explained:

An older person can understand the abstract better because they have
experience and they know that if you say something they can picture in
their mind’s eye what you are saying because they had the experience
and they had something to build on.

She concluded that the younger child lacked this experience and therefore
could not think at the abstract level. She too recommended the use of
“Concrete and what the children can see and feel and touch and so on, those
are the things that they are better able to deal with than the abstract”.

Ruby said she objected to the use of Abstract Material because of the
long-term effects it can have on the recipient. She explained that she was
taught via abstract teaching during her school days and while describing it as
“something else!” she explained that she knew from her experience that “you
can finish school and do not understand something abstract. She further
explained that before the ECE course the practice was used a lot but since the
course teachers have been sensitised to the inappropriateness of its use with
under-fives.

Deborah noted that “abstract should be avoided as much as possible at
this early stage” because of the way these children developed. She said:

I believe Abstract Material should be avoided as much as possible at
this early stage because of the stage at which the children are at
mentally, and at their maturation level. I believe that at this early stage
that they cannot deal with abstract information.

Lucille said “no” to the use of Abstract Material, noting that her objections
were based in the fact that she “tried” using the practice with her under-fives
“just to see how it would work”. She said she did not find it successful at all
and concluded that it could be used for the older age group but she felt

*Concrete* material should be used with under-fives.

Sonia explained the inappropriateness of *Abstract Material* in examples of the difficulty under-fives have in imagining various processes in their society. She argued that these students were small and could not understand things that were in the abstract, especially if they cannot see the process. She gave this example:

They are not aware that some of the food we eat such as sugar, juices, flour, meal etc. come from plants unless they witness the process. You have to show them the process in order to get them to believe. Most children believe that everything mummy buys comes from the supermarket, but they are unable to tell you where the supermarket acquired these products. You have to go into all these little details to explain to them how the supermarket acquires them.

The general consensus among these teachers was that the use of *Abstract Material* was not appropriate for under-fives. The teachers felt that learning experiences acquired with practices where there was free movement and the manipulation of materials were needed in the education of under-fives.

**Summary**

The teachers contended that language and learning experiences for under-fives should be implemented via practices that allowed freedom of expression, the elicitation of ideas from the child, the manipulation of materials and learning through the senses. They felt that an *Informal, Concrete, Real Life Objects* and for two teachers, *Abstract Materials* epitomised these requirements. Some teachers also noted the limitations placed on the learning experiences when *Abstract Materials* are used.
Focussing on the child's interest and creativity

Nine of the twenty-one teachers argued the need for practices that focused on the child's interest and creativity. For example, Mertie construed under-fives this way: "They like to explore, they like to be creative, they like to indulge in things that interest them". These teachers argued that because practices such as a Child Centred approach, allowed under-fives to develop these areas, their likes and dislikes are discovered. They further argued that the focus on the child's interest had the spin-off effects of allowing for participation in an environment where the children felt free to discuss things of interest to them. Mertie gave this example, "They might want to talk about a toy that they received for their birthday or Christmas. They might have gone visiting or to town with their parents and they want to come back and they want to talk about it". The teachers also noted that a Child Centred approach enabled the teacher to observe children's preferences and interest. Sonia said:

Sometimes children are given the preference of selecting the type of activity for a specific time. It is surprising that some of them prefer to go to the book corner to select books. Others prefer to dress up and pretend to be mummy or the teacher, while others prefer to build blocks.

Seven of the teachers also highlighted the benefits of focussing on the interest of under-fives during Free Choice sessions. For example Monica noted that a teacher could "see how children work together when they are doing their own thing... and the children, they are not bored, they love to achieve what ever they want to do". She also noted the benefits in terms of discipline, she said "And I find that the children are easily controlled ... because the interest is always there".
Eleven of seventeen teachers also construed the benefits of a *Child Initiated* approach in terms of focussing on the interest of the child. Diana explained the need for a *Child Initiated* approach in light of the experiences she had with older children who had been through the system and could scarcely write their names. She gave an example of the way she allowed a child, albeit an older child, to decide and identify what was of interested to her. She said:

I always remember this girl. She was in class six at that time. She could not read as such. She could not do a lot of adding but she could count, she knew money and so on.... But I found this child was very good with her hands. She could look at things like crochet and I was a person who had liked to crochet. This child just came to me everyday, watching me. And one day she asked me 'Can I do that?' and I asked her, 'Have you ever done it before?' And she told me no. She could not read so she would not be able to read a pattern. I gave her a piece of finished crochet (for her to follow) and she brought it (her own) back done beautifully. From there she started doing crochet. From there, I showed her how to cut a skirt and up to this day I cannot make...but she can be, let's say a designer in her own right.

She said she had concluded from this experience that it was important to allow the child to initiate and be allowed to develop his or her own interest. She noted the neglect of the interest of the children by the teachers. She explained:

I have found that children go through school and they may not be able to do in well in Mathematics or let's say in the *Formal* setting. But then there are other things that the children can do that we the teachers never really find out because we do not think of what is really interesting to the child.

She said she believed that each child was different and had gifts and talents that needed to be developed. She said she felt that teachers needed to seek out and identify these gifts and help the children to reach their potentials.
In another example of the de-emphasising of under-fives’ interest in terms of expressing themselves, three teachers noted the way teachers stunted the creativity of under-fives, even in the free art sessions. Joan said:

Even with the drawings, I used to like to see the children’s drawings. But because everybody was photocopying you end up finding yourself falling into that photocopying and colouring, photocopying and letting children colour. And then the head teacher pointed out, ‘you do not need the photocopying, let them draw on their own. You only inhibit their own creativity when you photocopy. And I knew this, I felt this, I mean a child of three and four years old you must expect that, you know you do not expect it to be exact. Those drawings came out; there were beautiful, beautiful, beautiful drawings.... And the things that come out with it...to you it just looks like markings, like a scrawl up, as you would say, but they know exactly what it was they were drawing.... But because the others were doing it and it was so much easier to just do this. Because again, everybody was saying, looking at the photocopy. ‘Oh your pictures are nice’ and ‘Oh you are this.’ It is pushing you towards that, that kind of way of thinking too. So you get into it.

Brenda summarised the arguments put forward by the teachers for the need to include a Child Initiated approach with under-fives. She also explained the compromise she felt could be made during a lesson. She said:

I think that Child Initiated lessons are good at times because it holds the children’s attention. It is what the child is really interested in and if the teacher is smart enough it can be used as a stepping stone to teach other things which the teacher has in mind. She does not have to throw off a day’s work because the child has decided to go a particular route, but it can help to at least get the child more interested in what she wants to present, taking it from a child’s angle.

These teachers contended that because the children were involved in the discussion and the topics were of interest to them there was a better response and interactions in these early childhood classrooms. Monica also noted other benefits that could be derived from the approach as the children expressed creativity. She said:
And this approach too the children bring out their creativity and it is very exciting to hear what the children have to say because they sometimes come up with unexpected things. The interest is very very high and there is no place for bad behaviour... the children are doing what they like best and what is important to them. The children are not bored they love to achieve whatever they want to do. The children are easily controlled... because the interest is always there.

*Free Choice* was also construed by ten of the teachers as allowing for the expression of creativity by the child. Monica said, “in this approach the children bring out their creativity and it is very exciting to hear what the children have to say because they sometimes come with unexpected things as it were”. Gloria from a rural primary school also described the creative nature of under-fives in *Free Choice* sessions. She said:

They cook food, they bake cake, they bring me birthday cakes, have their own parties, they make pizza, they make soup, they go on bus rides, they put fires, arrest people, all kinds of activities and things they come up with which I would never ever dream of. And they use the things in the classroom in ways I could never think of using them.

Eleven teachers argued too that teachers learnt a lot about a child when they offer them as Sonia puts it “the preference of selecting any type of activity for a specific time”. Sonia noted the surprise she experienced when she saw that some of them preferred to go to the book corner to select books than to go to the dress up corner and pretend to be mummy or the teacher, or even to build with blocks.

Additionally, ten teachers construed *Concrete* materials as catering to the interest of the child. They like Ruby argued the importance of the approach in terms of holding the interest of under-fives in the classroom and retaining information. Ruby said:

Of course you must have *Concrete* activities for small children because the children will go to sleep on you if you do not have something that
they are interested in and they can touch, the children will go to sleep. Tomorrow when you come back and ask the children they would not remember. Anytime that you can, have the Concrete, something that the children can touch. If you cannot find something that the children can touch, and you have something that they can see, even if it is a picture, the children would grasp it easier.

Despite the majority of teachers disagreeing with the use of Separate Subjects in the education of under-fives, one of the teachers argued her approval of the practice with under-fives. Iris argued that she liked “to include Separate Subjects sometimes”. She explained that in addition to focussing on the child’s interest the teacher can also discover whether the children like or dislike a particular subject. She explained:

I find this brings out the child’s interest, what the child is interested in. You might find that a child does not like Mathematics... you might be able to find out from the child, “Why you do not like this particular subject? I do not like to count!” Then you might show the child why it is important that the child must learn to count or whatever the particular child is doing.

Iris further argued that a Separate Subjects approach was “good in that you can help the particular child who might be experiencing difficulty” in a particular subject. She gave an example of the child who might be experiencing difficulty in counting. She suggested that the teacher can then “spend more time with that child in the mathematics area helping that child to count and to sort and to see the correlation of the other subject areas with that particular subject. She generally concluded that the use of Separate Subjects with under-fives “can be very, very helpful in bringing out the individuality of the child”.

Iris further contended that teaching under-fives using Separate Subjects had long-term effects. She explained that as the child grew older the practice could “help in choosing a particular career” since the “child who liked art
might become an artist and the child who liked singing might become a
musician”. She concluded by noting that when under-fives were allowed to do
these things they develop creativity and as a bonus the teacher saw the kinds of
things they wanted to talk about.

A few of the teachers described Free Choice as providing under-fives
with the opportunity to learn through creative play. This line of thinking was
reflected in Deborah’s description of her follow up activity after the Free
Choice session. She explained:

So they have the Free Choice and they are encouraged to complete the
task. They are not allowed to return the activity until it has been
completed and seen by the teacher. After that there is evaluation in
terms of discussing with the children what they have done, if something
could have been done a different way or a better way, what they have
gained from what they have done or so on. And then the activity can
then be returned. If they complete the activity before the end of the
session then they are allowed to use another activity. But the emphasis
is on getting the task completed.

Gloria maintained that when the children were given the freedom to
express themselves then they developed creativity. She told the story of how
under-fives in her class expressed creativity in the use of three hats. This is her
story:

I have three hats in my classroom ... and with these three hats these
children play-act so many things you wouldn’t believe it. The person
with the old hat becomes granny, going to church, going to town, going
all about, but as you put on this hat you are a granny. Then another hat
... some days it is the bus driver and they are carrying a bus load of
people to town, the next minute somebody else would have it on they
are a policeman arresting a robber and I have had a police catch in my
class. This child was chasing this thief all around the classroom and
she caught the person and she arrested them. ... Then they use the
other hat as a fireman’s hat and they have these fires and they go and
put out these fires with sirens.
Summary

The teachers construed practices such as *Child Initiated*, *Free Choice*, and *Child Centred* as allowing for a focus on the child's interest and creativity. The benefits identified included identifying they likes, dislikes and preferences, freedom of expression, eliminating boredom, improving discipline, identifying gifts and talents, encouraging and expressing creativity, holding the child's interest, better responses and interactions and encouraging learning. One teacher construed *Separate Subjects* as focussing on the child's like or dislike of a subject, developing creativity and having lasting impressions in the choice of a career.

Developing initiative and independence

The teachers contended that some practices aided in the development of initiative and independence. Fourteen of the twenty-one teachers argued that a *Child Initiated* approach provided under-fives with the opportunity to develop their initiative as they engaged in the process of initiating discussions and activities in the classroom. Deborah from a rural school explained the importance of a *Child Initiated* approach when teaching under-fives. She said:

I believe that children should learn to use their initiative. If they are directed in every way then they will not learn to use their initiative. They will grow up depending on others to make decisions for them, to tell them what to do in every situation and this will not benefit them in their life in general.

Joan shared a similar view and explained that she did not realise the importance of a *Child Initiated* approach to the child until she used it in her classroom. She argued that the practice was not fully utilised because other teachers like her, probably "knew how in theory but not in practice". After
her experiences with a project in which she said she used this approach she said she concluded that "the Child Initiated way was an easier way for the child, better for the child to learn"

In addition twelve of twenty-one teachers argued that Free Choice allowed for the development of independence in under-fives. Brenda noted that when the opportunity for Free Choice was offered to the children, "at that tender age that will help them to be a bit independent and do not rely on others". Iris said she believed "the child should be allowed some time of the day to make a Free Choice". She argued that freedom of choice should be given to the child because there were benefits to be derived from such choices. She said:

When the child is not allowed to choose that might kill the enthusiasm. If the child were allowed to choose that would show, again you would see the interest of the child, what the child’s particular interest is. And that would bring out the maximum to the child. You would see if the child is free to choose blocks, he might choose the blocks and go and build something. You will see the child is able to produce a wonderful piece of construction. And when the child is allowed to make a Free Choice, you may find that the child might stay with the particular activity for a longer time.

Some teachers felt Free Choice was beneficial in the developing in each child the ability to make choices in the classroom, which, they argued, was preparation for making choices throughout their lives. Deborah, who typified the idea expressed by many other teachers, described this advantage. She noted that:

Free Choice will help the children to learn to make choices in life and to make wise choices. They will learn to make decisions for themselves and if they select a particular task, the interest is there and it means they will work on the task until it is completed.
Another long-term benefit noted was that of promoting the independence of the child. Diana in explaining the importance of developing the child’s independence contrasted the child’s experience at home with what happens in school. She said:

There are things, like at home, sometimes especially when they are small, you find that parents would put on their clothes, they will button up, and they will do all these things. When they come into school you have your dressing up corner where you would let them get into clothes which are bigger than themselves and be able to button up, zip, get shoes that are bigger or tying the laces. That is their own way of beginning to show independence, that they can do things for themselves.

She further argued that the Barbadian adults were not independent and maybe it stemmed “from people doing things for them or they always wanting people to do things for them or they waiting on somebody to do for them”. Ten other teachers agreed and concluded that a Free Choice approach allowed the child to initiate as well as independence from an early age, which can prevent problems in later life. Veronica and Deborah felt that these young children tended to look at each other a lot and copy each other’s actions. To lessen the dependency both teachers felt that providing them with the opportunity to make choices was a means of developing independence in each child.

Summary

The teachers construed some practices as allowing under-fives to develop initiative and independence. They identified Child Initiated and Free Choice as the two practices through which short and long term benefits in being independent can be achieved. They felt that when the teacher allowed the child to make choices and initiate activities, these helped in their total development.
Developing self-confidence and enjoyment

Fifteen of the teachers said they believed a *Child Centred* approach allowed under-fives to develop socially, physically, emotionally and cognitively while and enjoy what they were doing. She said:

This (*Child Centred* approach) would help to build the child’s self-confidence. It would also give the child the opportunity to be able to concentrate and do what he or she enjoys doing. And out of that the child would be learning, discovering things for themselves and probably fitting pieces together, which they have been sorting out for a long time.... I think learning will be more long lasting.

Five of these teachers shared similar construing but they argued “the harm” that could be inflicted on the child if the activities were not centred on the child and its development level. Maureen said:

This is very important because it would harm the child at that age if the teacher does not centre the activities on that child. You can imagine a three to four year old in a class with activities that are suited to a six to seven year old. That child is not going to benefit because it is going to be way above their (sic) level.

They, like Maureen felt, that any activity planned by the teacher for under-fives “should centre around the child” and based on the teacher’s awareness of the “needs of those children”. Sonia said,

I am in total agreement that the teacher should centre their activities around the child. The teacher should try to find out their interest, likes and dislikes and plan the activities so that the children can enjoy them.

These teachers argued that the focus on the interest of the child helped to build self-confidence and enjoyment. Doreen further argued that when the teacher planned with “the children’s interest at heart” he or she created more interest for them and in them and this in turn built self-confidence.
Fourteen of the twenty-one teachers also argued that a *Child Initiated* approach helped to develop the self-confidence of under-fives. For example, Lucille, from one of the rural primary schools, felt that this practice helped “to build their self esteem... and (helped them) to become self sufficient”. These teachers argued that the children were able to socialise during the process of making decisions and initiating activities in the classroom and these activities built self-confidence. Mary, from a primary school, explained the importance of the approach to the child. She said:

Because you want the child to feel relaxed, you want the child to feel confident and comfortable, so there are times when you allow the child to initiate the activity.

Diana felt that such an approach allowed teachers to work towards building the self-confidence of the entire class but more especially those who needed help in that area. Gloria, from a rural school, also argued that she allowed for “a lot of pupil initiated activity” because she saw it as a means of expressing themselves while at the same time enjoying themselves. She explained that based on her experience she observed that “sometimes when they are writing, they start singing” and she did not stop them. She explained, “As long as they are doing the activity they are suppose to be doing and they are singing I let them go on. She said she considered the singing as a sign that they were enjoying themselves.

Fifteen of the teachers spoke of the *Free Choice* approach in terms of building self-confidence and enjoyment. Their views are reflected in this statement made by Mertie. She said “*Free Choice* sessions build self-
confidence and allow the child to concentrate and do what he or she enjoys doing”.

Six teachers noted when the children were in Small Groups they tended to express themselves more, they responded better and learned more. Joan explained the benefits of the practice to the under-five:

Teaching in groups, to me the child feels more comfortable within that kind of setting and you get more from them (sic) as they are more comfortable, they feel better, they feel more ready to talk and say what they have on their minds and they learn more.

Carmen explained the advantages she envisaged as deriving from the use of small group teaching. She said:

That is an area where I prefer to work - in the Small Groups, in that, to my mind you get more out of them and you get more of a one to one. You can pick up any little problems that the child might be experiencing at the time or it might have experienced. Because in a big group, some children are very shy and they might not want to say, ‘please teacher, I do not understand.’ But if you are in a small group or on a one to one, that child might come out and say, ‘please teacher, I do not understand’, or ‘I cannot understand, after this point I am stuck here.’ And you go through with them and then they say, ‘please mama I understand now.’ They have a sense of gratification that they have achieved something, it helps them to achieve.

Summary

The teachers construed practices such as Free Choice, Small Groups, Child Centred, and Child Initiated as building self-confidence and enjoyment. They explained that these practices, because they focused on the interest of the child, and allowed for a sense of achievement, as well as socialisation, concentration, discovery, relaxation, and self-expression, developed the self-confidence of under-fives. They argued that when these practices were used under-fives felt comfortable, responded better, learnt more and they, the
teachers, were able to elicit ideas and identify problems and as an end result build confidence and enjoyment among under-fives.

Catering for the all round individual development

Seventeen teachers inferred that the Integrated approach also helped to cater for individual development since the child developed skills that were linked with all the subject areas. Audrey typified the view expressed by most teachers when she said that it was "essential" to under-fives "since it helped to develop the whole child". She explained:

The child has an opportunity to develop its skills, and if you are really concerned about the development of children for life... you will realise that it is important that opportunities should be there for each aspect of its life to develop.

They felt that an Integrated approach helped because the child was shown the links among subjects and this catered for the child's perceptions of life.

Iris explained that she too placed some emphasis on an Integrated approach. She explained:

Through the particular topic you can see the connection in some way. You see so much coming out of a particular topic such as art and craft where the children can draw and model or make things. All that can come in.

Four teachers voiced their approval of the Integrated because of the relationship between the way the subjects are taught and life. Ruby explained:

When you start using the Integrated approach everything seems to tie in. You are not teaching one thing over here and you skip and go to another thing over here. It seems to be more structured.

The majority of the teachers also expressed similar construing. Sheila noted that the approach was good because "you can get Maths, Language Arts,
Science and everything coming out of one lesson”. Angela agreed that as a teacher you can "get some of all subject areas coming out in your lesson". She further argued the importance of the approach to the total development of the child, noting that:

It was easier to have that child growing in an atmosphere where in the end the child can sort out or kind of get its thoughts together. Then as it gets older you can gradually introduce the different subject areas that you would want to do at a later stage.

Mertie noted also the “lasting impressions” that were left “on the minds of under-fives” through the use of an Integrated approach. She explained:

The subject matter can be of great interest to them if they are allowed to see subjects not as individual topics, but see how they can be interrelated in going from one into the other an binding them and so on. So it gives them a holistic or closure, rather than leaving them with pieces here and there that they might not be able to see.

Deborah who explained how the use of the Integrated Approach helped the children in terms of remembering, also raised the benefit of interrelating the subjects. She said, “I think it also helps them to remember information which they are taught since they are able to see the connection between the material which is presented”. Lucille said she “believed in integrating subjects.... because everything in life is involved in any subject that you teach to them (under-fives)”. She concluded by noting that the Integrated approach when used was “more enjoyable... more beneficial for them than teaching via Separate Subjects”. Ingrid also noted the benefits to under-fives. She said:

It is the way that you get children to really respond to you, as we tend to use a lot of verbal activities in this area. And you get concepts coming out that you do not have to think of, they just readily come out when you use the Integrated approach.
Diana described the approach as her "pet topic" and her "way of doing things". She said she "liked and have used it, and it worked". She advocated the use of the Integrated approach not only in the nursery classes but in the lower school (infant) since she knew that it really worked. She said, "The teacher can see it really working very, very well. I think it is a break away from that monotony of having Social Studies where you are doing just a few topics on the home". She too highlighted the advantages under-fives gained:

I find that children learn so much more in an Integrated approach. Like for instance if we are going to do a topic 'Movement' there are so many things that move. You would not just do vehicles only, you would do like the wind, you get you movement out of the wind, and you get how animals move, how people move, the vehicles move how different people travel. There are so many things you can get out of that theme and every thing is integrated, the Social Studies, the Language Arts, and you get your Physical Education and everything else.

Monica also construed an Integrated approach in term of catering for the development of the whole child. She argued that:

The teacher can sit and plan a lesson around for example a health lesson about food, 'colour in food.' For Maths there would be the colour and size and shape that would come out and in English, well Language Arts, you can have matching, matching the different kinds of foods and in Language Arts the children can match the different food groups or circle the one that is different. For health we can look at what the different foods do for the body and Social Studies, this will deal with where food came from. In Art and Craft, colouring fruits and making collages.

Doreen agreed that the practice did make it easier for the teacher in terms of preparation of work to meet the needs of the child. She argued that because the teacher could "co-ordinate subjects, Social Studies, Mathematics, Language Arts," this resulted in all the subjects, as well as the child's needs being dealt with under one topic. She too felt that under-fives benefited since they were able to remember "other things from each lesson in dealing with
the same topic” than if the teacher had chosen a different subject area each
time.

Carmen construed the Integrated approach as “a medium” between
creating a Child Centred focus and avoiding Formal teaching. She argued
that the approach allowed the teacher to get “quite a bit out of it.” She
illustrated this point by describing her use of the approach on the topic “My
School.” She said:

We did Maths from it... we did time; we counted the children who
lived near the school.... I asked the parents then to send a note saying
what time they left home on mornings to come to school... and the
parents responded... They also did shapes, they were able to tell me
and find the shapes all over the school. We did Science... we took
them on a tour of the school. We went through the school and they
were able to identify the classrooms and so on.... We did Health, They
told me how they were supposed to behave when they go to the taps,
how they were supposed to dispose of their garbage from the
classrooms and around the school, how they were supposed to keep the
school. All of those areas we covered from that one, “My School”.

She concluded that this approach helped to prepare under-fives for the
Formal work they would encounter in the infant classrooms. Wendy felt that
the practice was “very, very good for young children” because all the subjects
areas on the curriculum were incorporated. She felt that this type of
integration of subjects was better for under-fives than the separation of the
subject areas since all aspects of their development were catered for at the
same time. Deborah epitomised the view of most teachers when she
explained the importance of the Integrated approach to the way human beings
think and learn.

I think this is important since our brains do not process information in
separate compartments. We think of things as a whole. We relate
things to each other and as a result of this I think that it is important that
the Integrated approach be used with young children.
The views of the teachers on the use of an *Integrated* approach were reflected in this statement made by Mary who said:

The *Integrated* approach is a big part of the *Child Centred* classroom because as I said you are thinking of the child, you are focussing on the child, you attention is geared towards the child deriving the maximum from the programme.

Some of the teachers noted too the pressure and effects a *Formal* approach can have on under-fives' total development. Five of the teachers who disagreed with the inclusion of a *Formal* approach shared concerned for the fact that the method was usually used to force under-fives to do *Formal* work. Sonia argued that given that the "children were 'quite young' they should not be expected to know certain letters, numbers and concepts by a specific time. The other teachers agreed and argued that the used of a *Formal* approach was mainly to teach numeracy and literacy without taking into account the age of the child.

Seven of the twenty-one teachers also shared the view that this practice should not be stressed in the education of under-fives because of the effects it had on the child. For example Sheila contended that given the high energy levels of under-fives, a *Formal* approach meant that the child was a passive participant and treated like older children in classes three (9-10 years) and four (10-11 years)”. She said she felt that under-fives should be actively involved. She said:

I do not really like the *Formal* setting that they have to sit down and they cannot move or anything so. They should be able to get up and maybe move around and touch different things, instead of just sitting down like how you would deal with a class three or four.
under-fives, they experienced difficulty in the implementation process because of shortages of equipment and materials.

Summary

The individual child was construed as being affected because of the lack of resources including materials, equipment, funding, and large numbers, resulting in the use of Academic Focus and Whole Group approaches.

Teaching large numbers

Ten teachers in the primary schools noted how impossible a task it was to use the practice Individually, given their circumstances. They again described the frustration they experienced when they needed to focus and work with the individual child, explaining that large numbers meant that the task was difficult or could not be accomplished. Veronica described her situation and the effort she made in order to develop each child as an individual, painted an overall picture of what some other teachers said she faced in the rural primary schools. She said:

At the same time, the setting of our, well the setting of my class, being personal, makes it very difficult for me to reach each child, each day. I have mixed groups, in other words I have children, three years, just turn three and (also) five plus. Those five plus are no longer in nursery category, so I need to work with those five plus as a reception child. So they probably now will be introduced to little Formal work. But at the same time, in my scheme book, I have to make my recording such that it covers from nursery to reception. So you see, on a daily basis I would have to do activities, prepare activities for the nursery children and while they are doing their little activities, I still have to be over at another table writing, doing writing...But I cannot mould all into one. So I try over a process of time to observe attitudes from free speech and free play, and watch what they do.
Gloria also expressed similar concerns and noted that because of the large numbers of under-fives in these classes the individual child often had to be neglected for the sake of the whole class.

Diana also noted the way the individual child was neglected in primary classrooms. In illustrating this point, she explained that *Whole Group* teaching continued to be used by some teachers who claimed that they were doing “what was best for the child”. “Teachers,” she continued, “treated everybody as if they were academically inclined and learning at the same rate” and the individual child was neglected. She suggested that teachers needed to be made more accountable for their classroom actions but this can only be achieved if they are given reduced numbers. This reduction in the number of under-fives in each class, she further argued, might help the teacher to focus more on the individual child. She said:

> And I like the word accountability, teachers have got to be accountable for the students they teach. If you give me forty children in a class I cannot be accountable for forty children. It is an impossible task. If you give me ten or fifteen children in a class I can be more accountable. I can expect that each one should produce, but I shall be able to see what they are good at and bring out the best in each child.

Ruby explained her problem with teaching *Individually*. She noted that while reflecting on her experience, she realised that despite her efforts she found it impossible to teach individual children in the classroom. She identified large numbers and the variations in ability within the class as the main factors preventing the use of the practice. She explained:

> It is hard to teach individual children in the classroom, it is very hard to teach individual children in the classroom. Still you make an effort because if a child is not doing well or whatever, and you need to help, you have to do it. So you need to have individual attention inside there. But it is very difficult to teach the individual in the classroom, very,
very difficult within the classroom, because the classes are so big and because most of the children are of average ability... it is very difficult within the classroom to teach each child *Individually*.

Ruby further questioned the necessity of "always catering to the individual in the classroom." She explained that she felt the practice should be used as needed and there was no need to cater for the individual child at all times. She said "I do not think you need to cater for individuals all the time. I think when it is necessary and a child needs individual attention, it should be given individual attention". Ruby felt this view was justified because most of the children in schools were of average ability and they would be able to get the work done. So when necessary, the teacher could concentrate on the child who may be "bright" and "could get bored" and the child "who was not doing too well and needed help". She explained:

> When you give a certain group work, most children would be able to do it. You can handle it if the child is very bright, or the child is very slow. Those individuals can get attention. But sometimes there are a (sic) big range of children inside the class that are average.

Maureen explained that she too worked with under-fives in *Small Groups* because the class was too large to focus on the individual child. She explained that she used the *Whole Group* and the *Small Group* approach and in the process she identified those who were experiencing problems. She further explained that after these lessons the children were involved in follow-up activities where they were regrouped in order to meet the needs of under-fives who might not have "grasped concepts more so than the others". Maureen noted that although individuals were identified, as needing follow up work, because of the large numbers it was not inconvenient to work with the individual child. She noted that the children were put into *Small Groups* and
she then worked with them on that basis. The other teachers who taught large classes in the primary schools substantiated the point, noting too that they used the Small Groups in order to focus on the individual.

Additionally, Diana like six other teachers argued way the child was doomed to fail in a system that did not cater to the individual. This was her view:

What I am finding is that people tend not to take the time with those slow children. If you come into a class and you are termed slow here, nobody takes the time with you. Nobody has time for you. And you go right through the system, nobody takes the time for you... No teacher takes the time to sit with that child or to help that child, so it is going to go right through the system the same way.

The teachers argued that the “slow” child going through the primary system and not achieving was because enough time was not spent catering to the needs of individual who did not grasp concepts as quickly as some others.

In contrast, the teachers in the nursery schools expressed little difficult in working with the individual child. For example Angela explained:

For general lessons I will have children come together but then I group and I might put them in groups and then yet still work on one individual child. Because from listening to them or watching them respond, even the expression on their faces, I can say to myself, well look, here is Mark, he is still blank. Then I know deep down inside he needs some more individual attention. So it does not make sense I am going to go on. So I put the others to work in groups and then I am able to work with him.

Angela, like the other teachers in the nursery schools noted that because they worked with a maximum of twelve children per session they found it easy to deal with each child on an individual basis in these settings. Their views on the need for small numbers in the classrooms with under-fives were epitomised in this remark made by Ingrid, who said:
Sometimes we tend to do some activities as *Whole Groups*. Now *Whole Group* for me means about twelve children. So I can afford to say, like if they hear a story and they are drawing a story and they are discussing the story, you can do it at *Whole Group* level.

In explaining the size of the class, nine teachers detailed the need for *Teacher Directed* approach with large numbers of children in the nursery classrooms in primary schools. For example, Wendy noted that in her situations she had twenty-four under-fives and no help. Veronica noted that she taught thirty-one under-fives and no one to assist her in terms of classroom management.

Monica detailed the problem with large group and a *Teacher Directed* approach:

> A lot of learning also should not be *Teacher Directed*. It should be, the child should be creative. But as again with the group, with the numbers as there are, and probably lack of material, you need to direct them. Because they are energetic and if there is nothing to do, they will find something to do, which would be, even something to their detriment. So you need then to direct them.

The other teachers in the primary schools echoed similar views on the size of the class. They argued that given the characteristics of under-fives for example active and learning through doing, there was a need for them to be free to move around and select materials from appropriate centres with the teacher instructing and guiding.

In light of the large number of under-fives the teachers also construed a *Structured* approach in the education of under-fives. The teachers from the three types of schools shared similar daily programmes and indicated that they needed or were instructed to use a *Structured* approach in the organisation of their day. For example, Ingrid from a nursery school described her day as *Structured* in this way:
When you first come, first we have to get you away from your parents, so you are encouraged to come in and find an area, an activity centre and see what you want to do, be curious about it and see what can happen in that area. Then you sit there or you may stand there or whatever and you work there in that area. Then the teacher may say, 'Let us sit at the table. Then let us go, let us have the assembly session' [like we are having now {indicating the Whole Group session that was in process}]. Then you go back and you sit at tables. You are made to feel comfortable.... Now they are sitting, they have got into a routine of sitting for maybe a little longer that usual. They are sitting, they are listening and they are doing things and they are finding out what is happening. After this session they go for outdoor activities and their morning break and then it is time to go home. The afternoon group follows a similar schedule.

Deborah from an infant school noted a similar beginning but noted changes after Free Choice. She said:

After the Free Choice activities there is usually then Formal instruction which maybe in the form of a picture discussion, there may be object discussion. From that then you may have Language Arts coming out which may be in the form of a sentence for the children to read. You may have your art where they may have to illustrate. You have your singing sometimes physical education, a game, and dramatisation. That is the Formal part. At the end of the session you may ask the children to go home and ask their parents maybe to tell them the names of three West Indian Cricketers... or what ever.

Brenda from one of the primary schools also started with Free Choice and then described what happened next in her daily programme:

Then I would go now to Teacher Directed sessions. For example one day I did number seven and I begin it with a story, we dramatised it and then I move on to Mathematics section where the children had to tell how many kids were mentioned in the story. We did activities as a Whole Group. From there I was able to get my Art and Craft, and that is how the morning session for that day went for me. The afternoon would be rest period, which would last till one thirty and then after the rest we have some poetry, sometimes music, physical education where we go on the outside.

All the other teachers described similar routines implying that in terms of organising the daily programme they felt some structure or routine was needed.
Twelve of the teachers felt that structuring an activity stunted the creativity of under-fives in the classroom and should therefore be avoided. Lucille said she disagreed with the use of a *Structured* approach in the presentation of a programme. She argued that under-fives “should be allowed to use their initiative, to be free to choose” without the *Structured* framework always present. She felt that a *Structured* approach in terms of organising activities “would come in at some point” but she did not “rate it too high on the list of the needs in the nursery department for the three to four year olds”.

Brenda also noted that there was no need for a *Structured* approach in terms of the programme. She noted the need however, for structuring the lesson but warned that in the process of structuring the lessons within the programme the teacher needed to take “the children into consideration”. This view was also shared by Wendy who noted the importance of considering the use of other practices in the education of under-fives. She said:

> I think it is very important that even though there is a period where there is going to be something more *Formal*, and there will be a time when there has to be more of a *Structured* approach, and there is a time when the teaching, it must be *Teacher Directed* and everything, yet the focus altogether should be on a more *Informal* sort of basis.

She contended that in the final analysis “there should be some structure generally in any classroom. Carmen explained that she conceived that a *Structured* programme was given in the form of a syllabus and it was needed to a certain extent but had to cater to the needs of the child. She felt that there needed to be structuring in terms of linking the syllabus with the varying abilities in the class. She explained:

> You have to structure your programme and in structuring you might find yourself having to limit your syllabus because you have a whole
range of things in the curriculum to cover. But yet, you know for sure that you would not be able to cover them, so you have to select specific areas and structure your programme to suit.

Joan objected to the use of approach because of the emphasis on the teacher who she described as “controlling everything”. Mertie felt that there was a need for “flexibility” within any Structured programme planned by the teachers for the nursery classes. She felt that the teacher should not “follow any rigid timetable” but allows for flexibility in terms of changing activities. She explained:

When you think the children are beginning to get restless, they might need a break. So they do not have to spend forty or forty-five minutes working in one area or one subject... but within that forty-five minutes they can have a variety of activities coming out that would stimulate them and also help them to be less restless”.

The teachers generally agreed that given the numbers in their classrooms there was a need for some form of structuring in the classroom.

Summary

The teachers construed teaching large numbers as a constraining factor in the use of the practices. They argued that large numbers meant that practices such as Teacher Directed, Structured, and Whole Group were needed. They noted the lack of individual focus and the resulting failure in the school system as influencing their use of the practices. The teachers contended that given the large numbers there was a need for Structured programming with under-fives.

Covering the syllabus

Eight teachers contended that their use of the practices was controlled somewhat by the syllabus, which they had to cover. They argued that they
taught via practices such as Separate Subjects, Whole Group, Teacher Directed and Formal in order to record work under the various subject areas in the scheme book. Veronica reasoned that “the fact that a syllabus is usually given, and a scheme book, and at the end of the week you have to write something in this scheme” meant that she had “to concentrate on one area”. She, like the other teachers argued that teaching via these subjects that focused on the cognitive development of the child was the easiest way in terms of getting the scheme book written up. Brenda whose construing suggested that she did not approve of a Separate Subject approach explained that since she completed the early childhood course that “advocated the use of the Integrated approach with younger children”, she did not use Separate Subjects per se”. She said she felt that it was difficult to maintain the interest of the children when the practice was being used but argued it had to be used in order to follow the scheme book and covering the areas set out there.

Wendy explained that she did not approve of the practice with under-fives but she too fell “in the category of one who would do the individual subjects”. She too argued that she “used this form of teaching because of the scheme book” but indicated that she did not really think it was the best way of teaching under-fives. She argued that her scheme book was set up with subjects and the daily plan she was given reflected these subjects, which she taught accordingly. Wendy concluded that she felt comfortable with this type of approach since “the subjects were rated out day by day and the scheme book asked that they be recorded as individual subjects”.
The syllabus was construed by fifteen of the teachers as a means of ensuring that under-fives were being taught. These teachers expressed the belief that some practices were means of accounting for what was to be covered on the syllabus within a given time period. These teachers argued that practices such as Formal, Whole Group and Academic Focus were means of being accountable for the kind of work teachers did as outlined in the syllabus. For example Veronica described the practice as needed in a system where the child was pushed through and expected to cover the syllabus at each level or class even if he or she was not ready. She explained:

You take a child who at five years old is not ready, and you send it on because the syllabus says that by this time, or the scheme book says by this age group it should go into Infants A and it goes on to Infants A without grasping all the concepts, the development of muscles and that kind of stuff.

For example Doreen said she believed Child Initiated approach should be a part of the early childhood programme but the demands by administration to follow and complete the syllabus did not allow for the use of this approach. Ingrid, Iris and Doreen argued that an Informal approach was not always possible because focus in the education system did not cater for the use of such an approach. They argued that teachers, often for the sake of covering the syllabus within a give time frame often resorted to Formal, Academic, Separate Subject practices.

The teachers also contended that even though Separate Subjects were often used to cover the syllabus there were some shortcomings in its use with under-fives. One of the teachers highlighted the fragmentation and separation of the knowledge that occurred when subjects were taught separately. Mary
shared her concern and noted the obvious overlap between subjects when teaching:

I do not recommend strongly segmentation in the early childhood setting because it is difficult to separate and teach Separate Subjects in that what ever you do that is an overlap. And because there is so much repetition and consolidation of content and skills you find that you cannot Separate Subjects as such. Whenever you do the lesson you find that you that you have the whole gambit of subjects coming out so we do not advocate Separate Subjects strongly.

Audrey shared a similar view. She argued that subjects should not be taught separately because children in the three to five age group did “not see things in compartments like adults do”. She too argued that there was an overlap in almost every area and separating the subjects meant that under-fives could not make the connections.

Deborah, too, reasoned that when subjects were taught separately, children had to deal with each subject matter in “a separate compartment”. She argued “our brains are not made up that way, we learn things as a whole”. Deborah explained that she felt that whatever subject a teacher taught it was possible to get "Math, English and everything coming out". She said she believed that there should be "a link between these subjects". In explaining the links she gave the following example “One can use comprehension in Mathematics, one can use Mathematics in Language Arts, Art in Environmental Studies, Music in all subjects areas”. She further explained that she “believed that if this linkage” was made, a “correlation” would occurred “between the subjects” and as a result “the children will benefit more, they (sic) (lessons) will be more meaningful to them and it will be easier to continue lessons, to follow on lesson from day to day.” She felt this the linking
of subjects would help the teacher to avoid saying to the class “Do you remember when I did such and such?” She argued that in most cases, when a Separate Subjects approach was taken “the children would have forgotten because of some other thing that had no connection at all to what you are trying to get them to remember”.

The teachers highlighted the disadvantages of using Separate Subjects to cover the syllabus. For example Doreen agreed that it was “more beneficial to incorporate subjects together”, but admitted that it was difficult when trying to cover the syllabus. She concluded that it would be more adequate to get the Social Studies and the Mathematics and stuff coming out of the lesson instead of teaching each subject separately”.

Lucille too added her voice to the objections to using a Separate Subjects approach with under-fives. She felt that the method was not appropriate for these children “because everything in life is involved in any subject that you teach to them” and the way the subjects are taught should reflect real life. Diana described a Separate Subject approach as “monotonous,” where for instance Social Studies was taught and “a few topics on the home, and the school” were done and these might be unrelated to any other lesson taught. She too suggested that since the subjects all “overlap” and the teacher should have a theme and build everything around it, that is, an Integrated approach should be used.

Angela indicated that she felt that “no three to four can really focus on a particular subject, academic wise, because when you looking (sic) at a three year old child, your main focus should be whatever you do to cater to the all
round development of that child". Mertie explained that under-fives were expected to “spend forty or forty-five minutes working in one area or one subject like older children and this resulted in the children becoming restless and needing a break". Ingrid also felt that the practice had no place in the teaching of under-fives. She said “We do not usually stress, emphasise these areas in the nursery setting.... Children at this young age, we know they cannot really grasp these concepts... This is not why they are in the nursery setting”. She felt that within forty-five minutes under-fives could “have a wide variety of activities coming out which would stimulate them and also help them to be less restless and at the same time they would be involved in what is happening”.

Wendy described the practice as the “rigid setting out of subjects” taught by the teacher and to which the children do not readily respond. She argued that when *Separate Subjects* were used there was “a rigid cut in every subject” as the teacher taught the “subjects in an individual sort of brackets”.

Carmen explained that a *Separate Subject* approach was often a part of the education in the 3-5 age group but every effort should be made to “inculcate them in the other subject areas” that is, use an *Integrated* approach. She felt that because the subjects were “separate but yet... included in the other areas” a lot of the problems associated with the practice were eliminated. Ruby also objected to the use of the practice noting that it was used before the early childhood courses to record work covered in the scheme books. She described ease with which the subjects could be related. She told the story of a lesson with her class:
This morning we were doing 'many' and 'few' and it started out as a Language Arts lesson for concept development. And we went outside and we looked at the coconut tree, and the coconut tree had in a lot of coconuts. And the children told me there were many and they learn the word 'many'. And it started off as a Language Arts lesson getting the children to speak and use those words when they talked about things. And it ended up as a Maths lesson. We came back in and I had a sheet with some frogs and I said “let us count the spots on the frog, and they actually counted the spots. I think they went up to twenty spots on the frog. And the other one had in few, I think we ended up with maybe three or four or whatever small number. And it started out as a Language Arts lesson and ended up as a Maths lesson.

She concluded that when the subjects were related the children grasped them easier than when done separately. Mary also gave an example of times when Separate Subjects can be used while noting that other areas or subjects impacted on what was being taught. She said:

There may be times when you are doing music and moving or may be a science lesson but even then at that time, even although it may be a science lesson, you will find aspects of other subjects, aspects of Language Arts, aspects of Mathematics.

Veronica and Iris felt that covering the syllabus meant that a Teacher Directed approach had to be used. Their views were summed up in this explanation given by Veronica, who said:

With the amount of children you have to deal with, and the fact that a syllabus is usually given to you and a scheme book, and at the end of the week you have to write something in this scheme... (pause). We follow the syllabus, a syllabus is given and you go by a syllabus.

The importance of completing the syllabus was stressed by five teachers who felt that they needed to be accountable to those in authority in terms of what they taught to under-fives. To ensure that the work was covered they felt that some measure of Teacher Directed approach was needed.

Angela summed up the process of accountability that most teachers said they went through. She said:
Every week you are supposed to hand in your material, what you plan to teach, you send in your proposed plan on Monday mornings, along with what you have taught them from the previous week set out in your book. And whatever you have in that book...the principal is going through all of them. So that means that when she goes through those, having checked my book every week, she would know if I stick to what I had planned to teach.

To accomplish the goals set out in the syllabus they described the situation as that in which under-fives had to listen and follow instructions as a teacher presented knowledge. As a result, these teachers stressed the necessity of Teacher Directed approach in these circumstances. They further noted that if the role of director or facilitator was used effectively and the under-five remained the centre of focus, then the teacher not only clarified concepts but developed feelings of security in the children while meeting their needs.

Other problems encountered

Some teachers argued that the shift from learning by rote to teaching the individual was a step in the right direction for ECE. They felt that this was in keeping with the recent trends in ECE in the developed countries and with the training they received. Others objected and wondered why and how they could focus on the individuals in their settings. However, not all the teachers construed the Ministry of Education as an enabling factor in their construction of their personal practical knowledge about the practices.

A few teachers questioned the existence of a curriculum for under-fives while others wondered if there was an education officer for early childhood education and if the Ministry had any policy on ECE. For example, Ruby's construing of the lack of a policy for early childhood education as "floundering". Others argued that even though ECE was the foundation of
education the Ministry of Education did not take it seriously. They construed the shortages of material and equipment and facilities in the primary schools as a sign of the Ministry's lack of care. Deborah typified the view of most of the primary teachers when she said:

Well they said they are all for early childhood education, that is debatable! For example, you do not have the materials being provided, you do not have the space being provided. And I am hearing that you only take them if there is space, if a teacher is provided, if there is furniture, so to me, it is not like a priority.

Individual teachers also varied in their thinking about the contribution officials from the Ministry of Education made to the constructions of their personal practical knowledge. The teachers highlighted conflicting comments made by visiting officers who either criticised or applauded their use of the practices construed as suitable. For example, Lucille said she believed in the practices construed as developing the whole child said “I have been encouraged by an education officer...I remember her final comment to me was ‘do not let any body change your style of teaching‘. She though it was very effective”. Audrey highlighted problems faced by other teachers in primary schools. She noted her use of the practices construed as developing the whole child and the mixed reactions of some of the officers who visited her classroom. She said some were in favour of the practices being used while others were “not too keen” on what was happening in the classroom. A few suggested under-fives should be taught to sit quietly and write while others objected. She felt that this was so because “they were not aware, they had not educated themselves into what was really educationally sound for the children in that age group”. She explained why she felt they did not approve these practices:
Early childhood education has not been a very big focus in earlier years, only something that we are focussing on in recent times. So there are lots of people out there in the system...who might not see the importance of it since they have not taken the time to do any research or find out why these practices are necessary and important.

The teachers’ construing of the Ministry’s position and provisions concerning ECE, as well as the encouragement and conflicting views offered by official from the Ministry signified the need for, and importance of, clear and specific policy about ECE as well as the provision of environments conducive to implementing these policies.

The Ministry’s perspective was also construed as including the curriculum and syllabus for under-fives. While some of the teachers claimed they had never seen an early childhood curriculum or syllabus, others maintained that these instruments played a central role in building their personal practical knowledge about under-fives and the practices. For example, Angela said:

They send a lot of different syllabuses, on areas like for physical, the social, so you can break it down into four areas, so that when you are teaching you can refer to these to make sure you are going along that area.

Some of the teachers from the primary and infant schools also inferred or explicitly stated that they construed the need for practices perceived as focussing on cognitive development for completing the syllabus as outlined in the curriculum. They argued that given they had to account to the principal and parents for the work covered, there were times when the practices construed as developing the whole child were appropriate and most other times when the practices construed as focussing on cognitive development
were needed. The learning outcomes of under-fives were also considered in
the teachers’ construing of the syllabus.

Individual teachers noted too the full support and encouragement given
to experiment with their new-found ideas after they returned from the training
courses in ECE. Others highlighted the problem with principals and teachers
who objected. This was reflected in comments such as “not in my school
(Ruby), “what foolishness you were doing?”(Deborah), and “they play too
much” (Audrey). Some of the teachers argued as Carmen did

They are the people who make the decisions. The administration
decides this is the method to be used. They state the rules and
therefore you have no choice but to follow the rules.

Some of the teachers described their discouragement and frustration in
regard to the system and falling into the custom of the school. For example,
Joan explained that she had been exposed to the practice construed as
developing the whole child in her training at an overseas institution, but on
returning to the early childhood classroom in Barbados she was criticised for
the work produced by the children. For example if they “coloured the cow
blue” or “drew a picture upside down”. She described joining the other
teachers and giving under-fives photocopied materials because the other
teachers though these looked “so good” when once the children had coloured
between the lines.

A few others noted their perseverance and the change of attitudes of
both the principals and the teachers when they saw the long-term success from
the inclusion of practices construed as developing the whole child. For
example, Deborah said:
But in recent years I have found that people are begging to have the class that I have taught. The children are well disciplined, they are well mannered, and they have good work habits, good work attitudes. You give them a task and they will complete it, and they will be looking for more. And I find that in recent times that people have been asking for the classes that I have taught.

Summary

The teachers suggested that practices such as Separate Subjects, Whole Groups and Teacher Directed were needed to cover the syllabus. They also contended that the work covered was recorded under the various subject areas in the scheme book, for example Mathematics, Science and Language Arts. They explained that practices such as Child Initiated, and Informal were often neglected in order to cover the syllabus. The teachers argued that subject matter was taught in separate compartments to cover the syllabus and account to those in authority, but an integrated approach was needed when teaching under-fives.

Experiences with Parent Involvement

An approach, which relied on Parent Involvement, was construed as a practice that benefited under-fives. Seven of the teachers, while acknowledging the importance of Parent Involvement, related to it in terms of the support parents offered the teachers and their children. These teachers, mainly from the primary and infants settings, felt that teachers and parents needed to work together in the education of the children, and this they felt was done through communication with the parent. For example, Brenda identified the advantages to be gained when the parents offered support to the teacher. She noted that the Parent Involvement brought results in terms of discipline,
problem solving and making the job of teaching easier for the teacher. She explained:

I think with parent and teacher working hand in hand that you get less discipline problems. You find that your work would be much easier since parents would be keeping track of what is happening and give any assistance they would be able to give at home. Also the teacher would know that, okay, they have a good rapport with the parent and they can feel free if there is a problem, they can sit and iron it out with the parents. And in all that would make the classroom a better place to work in since you have the parent backing you. And you know that problems, which you encounter you can feel free to discuss with the parents.

Ruby also highlighted the cognitive contribution of the parents as construed by the six other teachers, in terms of their support and help to the child's education. She noted that when parents were not involved "the children were kept back "because what we are doing in school can be added to, can be enhanced by parents helping their children at home". Brenda summed up their views in terms of parents as supporters and providers of information when she said:

I think that parents need to be involved in their children's education. Gone are the days when it was just the teacher's job to do this and it finishes at school. I think parent need to take an active role not only in assisting with work but any problem which the teacher has.

Five teachers also voiced concern for the view they felt parents held about the role of the teacher in the education of under-fives. These teachers explained that parents believed that they did not have to be involved because they saw "teaching" as the "teacher's job and she must do it". Given this perceived perception of some parents' attitude to their involvement in the education of under-fives, Ruby, like seven others, expressed difficulties faced
with *Parent Involvement* in the education of their children. Ruby summarised their view:

*This Parent Involvement is one of my pet peeves because I never could get parents involved in their children’s education. We have come a long way in Barbados all right but that is one thing that parents do not really feel, some parents do not even really feel that they have to do anything to help their children as far as education is concerned. ...I could never get parents involved in their children’s education enough.*

These teachers argued that parents became involved when their children reached class four and were ready to write the Barbados Secondary Schools Common Entrance Examination (BSSCEE) but when their children were in the infants and lower juniors the parents did not think they needed to be involved. The teachers from the rural districts wondered whether the problem was a “rural problem”. They expressed concern that parents in the rural districts never spent enough time with their children and even though they said they noticed the parents’ attitudes were changing, they still had their priorities “off focus”.

**Communication between teachers and parents**

The teachers felt that communication between teachers and parents aided in helping them gain the confidence of the child. They identified the advantages to the child and the teacher when there was an exchange of information between the parent and the teacher. Audrey said:

*So there should be a good rapport between the parent and the teacher so that the child can see them working together for the same goals. They should discuss the importance of what happens at home, how it is going to affect the children or the child and the two them should work together, parent and the teacher should work together to help foster the total development of the child.*
Adding to this view, Ingrid from a nursery school noted that good communication between the parent and teacher was needed both ways. She noted that open communication served to keep the teacher abreast of the personal problems the child may be facing as well as problems related to the child’s development. Ingrid explained:

The parent should be involved so that you know as the teacher if the child has any personal problems, any physical problems. You get to find out what the child can do and cannot do, the level the child is at. It assists you a lot, when you work with the parents.

Wendy felt that an exchange of information about the child between parent and teacher could result in the resolution of problems that the child may be facing. She illustrated this point in a story of a child in her class who had a problem that was solved only when the parent took the time to explain the situation in the home. This is her story:

I had a little girl, we were doing... filling things with air. And another child brought a beach ball to be filled with air. And I noticed this child behaving so strangely, in a fearful way, as if she did not want to be around the ball and she was afraid. So I did not understand why! And after we had blown the ball and so on she still, well the fear was, not as much, but she still had a slight fear. I allowed her to catch it as well, and she did. But in the afternoon I was able to talk to the mother and to ask her why it is that the child was afraid? And then subsequently, this same child, another one has a balloon and she expressed this same type of fear, running and wanting her mother and so on. So I spoke to her mother and asked her why is it that this child has this fear? Was there something wrong with balloons? She afraid! And then she was able to explain to me that when this child had a birthday, there was this arrangement where there was some toy or something put into this balloon-like structure, and you burst it to get the toy. And when this happened this child was so afraid she ran and screamed and afterwards she settled down and so on. But it seems as though this has done some damage to this child. And the ball then had look like the balloon in her mind. And that is why she was so afraid... Her mother then said, well she is going to take her and give her balloons and help her to become, to be able to see that a balloon does not do you anything.
Wendy described this as the kind of *Parent Involvement* she appreciated, especially when the teacher did not know what happened at home, or the history of the child.

Sharing a similar view Deborah, from a rural school, also noted the importance of keeping parents informed about life in the classroom and what was happening there in terms of what the child was being taught. She explained the kind of information the parents should be given and the benefits to be gained when there were kept informed:

They (parents) should be notified by the teacher about the particular unit being taught, about the material the children may need to collect. They should be informed about what the children are going to be doing with the material, and when they are sent home to collect the materials or to find information, the parents will be well aware of what is going on and they will be able to lend a hand.

Maureen explained that even thought she did not use the practice there were advantages. She noted parents as supporters of what was happening in the classroom resulted in the teacher feeling motivated, confident and wanting “to do even more to help those children”. Deborah explained the advantages to be gained when the parents were involved outside of the classroom. She saw the parent as aiding the teaching through helping at home and thereby supporting the teacher. She explained:

Parents help as it were to hold up the hand of the teacher. What the children learn at school, if the parents are involved they will help to implement it at home. They will give strength to what is being taught by the teacher. Also you will find that the parents will be of greater support to whatever the teacher is doing in the classroom. For example, if a tour is planned, say for any particular unit, and you have the *Parent Involvement*, they will support your plans and you can even count on them for providing materials that might be needed. Also even their time, they might be will to accompany you on the tour if necessary. And I believe that parents should have great involvement in what ever is being done in the classroom.
Veronica also highlighted the need for the help given to the child at home by the parent. She felt that *Parent Involvement* was needed in the area of the child's speech especially when the child was taught something at school that conflicted with what the parent did at home. She gave an example of such a situation:

*We need Parent Involvement* and it is very evident especially in speech. In the classroom we try to get the infants to speak, little ones that just come to school, to speak English, not to sing or not to babble because they can understand. So we use vocabulary that is in their age range and introduce them to correct words... the child goes back home and the parent continues with, you know. So we need them to be involved in the learning process that they can go hand in hand with us. So if I teach certain areas or try to instil certain things in the children and then they go home, and the parents' view is opposite to mine, the child is nowhere. We need then the parent to be involved.

Ruby also highlighted the advantages of the home support of the parents in terms of helping with homework and reading to or listening to the child as he or she read. She argued that this was very important in terms of supporting and encouraging the teachers in the classroom.

**Involvement in the classroom**

Five teachers, two from the nursery schools and three from primary settings, indicated the importance of having parents, not only as supporters and informants, but involved in the classroom. While emphasising the importance of *Parent Involvement* in early childhood education they noted the various ways in which parents could be involved. Mary, one of these teachers expressed the view shared by the others when she described her feelings about *Parent Involvement*. She noted:

I feel very strongly about *Parent Involvement*, I feel that *Parent Involvement* does have a place in the early childhood classroom, and I
feel that parents should be allowed to come in.... They should be allowed to give their views and they should be times when they can come in either for observation or maybe as a resource person, anything like that. But I do feel strongly about Parent Involvement and I know Parent Involvement does have a place in the early childhood classroom.

Mary noted that she had done some research on the area and recommended that they should be involved not only at the support level, but also in the activities of the classrooms.

Some teachers felt that the child as well as the teacher could benefit from the parent who has knowledge in a particular field of work. Iris said:

You will find that the intelligent parent, who knows what is happening at that particular age, may be able to help and guide the child at home. And also that parent might be able to come and help with some very helpful and important methods. That parent, through discussion with you, might be able to give you some pointers into how you may be able to help the particular child. ... The father who is a gardener may be able to come and help make a little garden at school or sow some seeds... The parent who is an artist might come and help practice the children with a few movements. The parent who is a doctor or postman may act as a resource person or help with a particular lesson.

In adding to this view, Mertie also emphasised her belief in the involvement of the parents, noting the contribution that they could make in terms of their time and talent. She explained it this way:

I also strongly believe that parents can be involved in the child’s education at a very early age, probably in a number of ways. Wherever possible, if there is a parent or two that are not working they can probably give their time sometimes, or their talents. They can come in, they can assist in whatever way they can. Also there are others who might be involved in different areas of occupation, they can come in and probably address the children or talk to them, share some of their knowledge with the children.

Angela shared a similar view on Parent Involvement as she explained the importance of parents in the education of under-fives. She described Parent Involvement in terms of the parents offering ‘practical help’ in the classroom in
relation to their work, thereby providing skills in areas where the teacher may be lacking. She explained:

There are some parents out there, really good, because you know we have some very skilful parents. So I can draw the little fancy scribbles that my children sometimes would tell me, ‘teacher, that is not a man!’ But there have some parents out there, really good. I usually utilised those parents that I know can draw well. I get them to make my charts and things for me.

Diana who expressed these thoughts shared a similar view:

I always think that parents, especially for this very young age, because like my class for instance, there are twenty-three children and only myself, and parents who are willing, there are lots of things that they can do to help. There might be some little things that the parents can do to help... I had quite a lot of help from parents. If I am doing a project I just tell the parents what I am doing and all the materials I need. Whatever they can find that would assist me, they go all the way to really get it for me.

She noted that this kind of help was only possible when the teacher took the time to get to know the parents on an individual basis, find out what the parents were like and then communicate with them accordingly. Audrey acknowledged the help that could be offered by parents to teachers with large classes. She noted that they could help in terms of “drawing pictures, assist in the preparation of materials... wash toys or equipment that children used... cut up material... go on trips in the neighbourhood”.

In highlighting the ways in which parents can become involved in the life of the classroom, Sheila expressed the wish that more parents would become involved, especially those who were not working. She described ways in which she had been helped in the past by parents who were not working and expressed feelings of satisfaction with the kinds of help given. She described parents as coming in helping to “share out paper... draw, pass
out crayons and pick up books and things like that”. In addition, she noted that if she stepped out of the classroom the parents keep the class quiet and said nursery rhymes with under-fives until she returned. Sheila said she felt “okay” with that kind of help and was willing to have the parents involved in her classroom.

Iris noted her conflict with *Parent Involvement* but highlighted some of the ways in which she felt the parents could be involved. She felt that the parents should be told of planned activities and then invited to help in anyway they can. She described some areas in which the parents were involved in her school:

Last term we mentioned that we wanted some funds to buy some games and toys. Some parents made cake and one day we had a cake selling day and another day we had an ice cream selling day when the parents sent ice cream to sell. Another day parents brought corncurls and sweet biscuits. Not only that but some parents come by from time to time and spend part of the day assisting ... share out paper, help us to get out the paint.

Iris noted that she approved of this level of interest shown by the parents and indicated that they were “really helpful”, and that she was "thankful” when they were “a part of the school” and showed “that kind of concern for the child’s development and the child’s welfare”.

The general consensus among seven of the teachers was a need for *Parent Involvement* in ensuring that the child was being totally developed under the guidance of the teacher.

**Effects of parents as aides on the under-fives in the classroom**

Six teachers whose associations suggested they objected to *Parent Involvement* expressed concern for the treatment of under-fives by parents
who come into the classroom as aides or helpers. These teachers, while acknowledging the need for parents to be involved in the education of under-fives, objected to *Parent Involvement* in terms of the parents as aides or assistants before certain measures were in place. These teachers identified what they saw as areas of concern that related to the parents in the classroom.

Carmen viewed *Parent Involvement* as encouraging as well as distracting, noting that she had no objections to the parents as aides or assistants. She noted that parents who were involved in the classroom should be those who were “interested in looking after the little children, helping them do certain little activities and so on”. On the other hand, she felt that “if parents come in and want to ill treat the children.... If that parent now is one who push the children in a corner, hoot them down and make them feel badly about themselves” then, she objected to the practice. Iris also argued against *Parent Involvement* in terms of the treatment of under-fives by the parents even when the teacher was present and in charge. She described her experiences with parents on a tour to a site outside of the school. She said:

> I find that some parents want to control the child although the teachers are there. And they say ‘come here, come with me’. And I go and say ‘we are eating and the children should sit and eat together and we have to keep them together’. The parent might want the child to be with her. And we say, ‘oh no, they belong to us today, we are still the teachers’.

Doreen also construed the attitude of the parent whose child was in the class. She noted that the parent might express the views “I do not want anybody touch my child, ... my child must sit here by me, ... I am going to pay attention to my child.” She further noted that the parent might look after their child more than the other children. To prevent this “partiality” she suggested
that the parent involved as an aide or helper should be a "neutral parent."

having none of their children in the class.

Lucille also highlighted the effect parents may have on under-fives. She described these children as becoming "very aggressive and inattentive" and concluded that the presence of the parents "was not much help". Doreen also noted the changed attitude of some children when their parents were present in the classroom. She described these children as "not paying the teacher any attention" when the parent was present. Iris also highlighted the effects of the presence of the parents on the child. She described the changed attitudes of the children when their parents were present. She said "I find that when the children see the parent sometimes they react a bit shy, timid, and they rob the child of the opportunity to run about with other children and socialise”. She explained that she had previous experiences with Parent Involvement in the classroom and based on these she had concluded either the parent should be kept out of the classroom or that training should be available for them before they worked with under-fives at the classroom level. She explained:

I do not believe that parents at this time, unless they have been trained, can make much of an impact on the children in the classroom. 

...Because I believe that parents should be trained. They would have to be given some guidelines. I believe if they were trained, their help would be more effective.

However, Angela told a different story in terms of the child’s reaction to the parent in the classroom. She noted that she observed that the children showed more interest and had positive responses to the presence of the parents. She described such a situation:
When I bring a parent in a classroom you will find that even that particular child, although it is his or her mother there, has just as much interest as the other children do. ... As soon as a parent is in the classroom, you get this feeling that, I do not know how to express it, but you see the children, they feel good, and sometimes they respond well. Sometimes they respond very, very well.

Angela explained that she felt this reaction was a result of the parents being asked to do a particular task and, when the task was completed, the parent left. On the other hand, the previous teachers described the type of involvement where the parent came in to help and spent the day without a specified role. The teachers concluded that the parents needed be given a particular role, specifying the task to be undertaken if they were to be involved in the classroom at any given time.

Conversely, Gloria, one of the teachers who also agreed that parents should be more involved in children’s education, also expressed concerns about the effects on the parents with children in that particular class. While noting that she never really had parents present in her class, she explained how she though she would feel when she visualised herself as a parent with a child in the same room. She said:

Having to sit down and see my child being naughty, or see my child involved with another child in an altercation or something, and hope to sit there and don’t say anything, let the teacher handle it, as a parent, I don’t know if I could sit down and do that.

Gloria concluded that since she was not certain about handling such a situation then she was not sure that the parents who were involved in the classroom should be the parents of children in the classroom. Instead she, like six others, suggested that parents involved should be those without children in
the class. That parent, they continued, would then feel free to interact with all children and would not have any tie to a particular child.

**Parent education programme**

All the teachers suggested that a parent education programme would benefit both the parent and the child, especially if as proposed by the Ministry of Education, the parents were to be involved in the classroom activities. The teachers felt this measure needed to be put in place before they become involved. They argued that this measure was needed in order to eliminate problems that they had either experienced or that they envisaged happening in the classroom when the parents were present. The parents, they maintained, would be able to understand what was expected of the child at this stage and as a result help the child. The advantages of this type of education to the parent was summed up by Diana who said:

> Some parents need to be educated. As the methods being used are explained to the parent, they become more educated and wiser, helpful and more thankful, after being guided. And they are more help to the child.

Iris described an experience shared by seven other teachers, in which the parent's lack of knowledge was evident. She said:

> Only last week this parent told me that her son could write his name. And she said to her son, 'come and write your name for the teacher.' I gave her a piece of paper and a pencil. I find out he is writing his name with all capital letters! I had to explain to the parent, 'he can write his name but that is not the best way to do it. Only the first letter should be capital letters and all the others common letters,' and then show her step by step that we use a particular method to form and write the letters.
Seven teachers shared concerns about the level of knowledge the parent may have about teaching, and his or her willingness to learn. Doreen spelt out their concerns:

If the parent is aware of what is happening in the classroom or if the parent has been exposed to training, if the parent is not familiar with these things it can pose a problem. If the parent is a parent that is willing to learn, no problem or if the parent is trained or a parent that is interested in learning what it is all about, it can work.

The teachers felt that when parents are exposed to education programmes they would have a better understanding of the activities that under-fives needed to participate in the classroom. Four teachers spoke of their experiences with parents who kept their children home on the day of an important function such as a concert, without prior notice or explanation, when the children had a part to play in the programme. Six others spoke of parents who did not want their children to paint because their clothes may become soiled and who refused to send old shirts for the children to use as protective covering. Five teachers spoke of parents who ask that their children not sit on carpets because they may sneeze (lots of children were asthmatic) and not go for walks because of the sun. These teachers expressed the opinion that if parents were educated in the way young children learned and held a positive relationship with the teacher then the parents and teachers could reach some common understanding on these and other areas.

Summary

The teachers construed their experiences with parent involvement in terms of the effects the presence of a parent may have on under-fives. They felt that either the under-fives were not co-operative or reacted well to the presence
of the parents. They noted that the parents chosen, should have an interest in the children and should not be partial or mistreat under-fives in their care. They contended that parents should be provided with particular tasks when invited to the classroom and that parents should be given training before working in the classroom. They felt all parents should be provided with parent education programmes and there should be open communication between the parent and teacher. They suggested that parents should help the child in the home environment.

Summary of Classroom Experiences

The teachers’ Classroom Experiences revealed the factors they perceived as influencing their use of the various practices. These included contextual problems, and the lack of resource material. They argued that because of poor physical facilities and lack of space there were some practices that they found easier to implement than others. They explained that in a classroom where there was a lack of the essentials such as space and materials then they had to resort to practices they perceived as first developing the cognitive aspects of the child, for example, Formal, Abstract Materials, Whole Group, Separate Subjects and Academic Focus. The teachers also construed teaching large number of under-fives similarly. They contended that the size of the classes meant that there was often a lack of material and so they had to use Abstract, Whole Groups, Formal and Academic Focus in their classrooms.

In addition the teachers further argued that covering the syllabus was also a constraining factor in the use of the practices. They contended that mainly before their training in early childhood education they used practices
such as *Academic Focus, Formal, Whole Groups* and *Separate Subjects* with under-fives in order to cover the given syllabus. They felt that training in the area showed the need to also include practices that develop the whole child, these included those they perceived as focusing on the child.

The teachers also construed the effects of *Parents Involvement* on under-fives. They argued that parents in the classroom might have negative or positive effects on under-fives. They contended that parents should be involved in the education of under-fives, especially in terms of the home environment and communicating to teachers any problems related to the child. They felt too, that parents involved in the classroom should be given specific task and exposed to training and parent education programmes before entering the classroom.

The teachers suggested that their personal practical knowledge based on their classroom experiences should be considered when improving the education of under-fives.

The next section presents the teachers' construing of the practices in relation to a *Traditional Academic Focus*
This section presents the teachers' personal practical knowledge gathered from interviews and grouped under this theme "Traditional Academic Focus". This theme presents the teachers' construing of the way they felt tradition influenced their beliefs about the practices. Sub themes that emerged from the analysis of the interviews (Table 14) included Personal development, Expectation of parents, The expectation of teachers and administration and Traditional BSSCEE. Summaries of the teachers' interviews are now presented using these themes.

**Personal development**

Eighteen of the teachers described a change in their beliefs concerning the way under-fives should be taught after they completed an early childhood course. These teachers explained that traditionally they used practices they construed as focussing on the cognitive development of the child, but argued a need to include those they perceived as developing the whole child. For example, the teachers argued that traditionally *Whole Group, Separate Subjects, Academic Focus, Formal, Teacher Directed* approaches were used with under-fives as with other age groups. The teachers described the need to include *Child Centred, Individually, Child Initiated, Integrated, Informal, and Free Choice* practices in schools. They felt that this shift needed to be done from the early stage, that is, in the nursery classroom. Diana explained it this way:

So what I am saying is that something has to change from down here, it has to change from down here. I am saying that each child is different and we have got to look at the needs of the child rather than what we want. Each person wants the best for their child but what the child is
capable of doing is something different, and we have got to cater for that. And I am saying that the education system is going to have to change and gear towards that. I think we need to go the way of catering to the different individual needs.

As expressed in the sections Benefits to under-fives and Classroom experiences the teachers described the factors influencing their views of the practices. For example, seventeen of the teachers argued that an Academic Focus, that is a focus on literacy and numeracy was a practice that affected under-fives. Mertie noted that the use of an Academic Focus at this age was difficult for young children and they did not enjoy these lessons. She explained that the opportunity for participation was often limited especially since the teacher dominated the sessions. Sonia spoke of the disadvantages the child faced in this situation since he or she would not be able to relate to what was being taught. Monica contended a programme with an Academic Focus was often unrelated to under-fives. Iris highlighted the boredom and frustration that may result when the practice was used with under-fives.

Ruby explained that exposure to the importance of Small Groups and teaching Individually during her training at the local college, resulted in a change of attitude in terms of the use of Whole Group approach. She said she considered it to be an “old time method” to be used sparingly. She maintained that she had “been using the method a long time... before I had done the early childhood course”. She noted however that research showed that when teaching under-fives Whole Group teaching was not recommended. She said she felt that the practice still “had its merits but not all the time”. She concluded that there were “certain times that you must use Whole Group but not all the time”.
The consensus among the teachers was that their personal development as provided through training in ECE helped them to realise the need to use practices focusing on the total development of the child compared to those they used before the training.

Summary

The teachers contended that before training in ECE they traditionally used practices that related mainly to the cognitive development of the child. After training however, they explained the need to include practices that cater to the total development of under-fives.

Expectation of parents

Fifteen of the teachers argued that they believed in the use of practices they were exposed to in early childhood courses but this new found knowledge often conflicted with traditional ways of teaching. They argued that practices such as Child Initiated, Free Choice, Child Centred, Informal provided under-fives with the opportunities to initiate discussions, discover things for themselves, move freely, and interact with each other as they worked at activities. They argued however, that due to perceived pressure from some parents, teachers and administration to implement practices with which they were traditionally familiar, the infrastructure and approval were often not present to implement their new knowledge.

When probed all the teachers noted their construing of the practices in terms of the pressure they perceived as coming from the parents, for practices they perceived as traditional and catering to the cognitive development of the child. The teachers argued that their views of some practices conflicted with
those expressed by some parents. All of the teachers noted that the parents often expressed concern when the focus was not on writing. They explained that some parents expected their children should to sit quietly and learn to write by the time that they finished the nursery or at age four. Mary described the opinions expressed by the teachers when she argued that parents were “in a hurry” and wanting “to rush” because she guessed, they had the “common entrance at the back of their minds”. Monica too, shared their views when she said “I find some parents think all the children need to do is get ready for the eleven plus from an early age.

The teachers agreed that they perceived parents as wanting under-fives to be taught via the same methods they were exposed to in their (parent) school years. These methods included those construed as focussing on the cognitive development of the child for example Academic Focus, Formal, Separate Subjects, Abstract Material and Whole Group. The teachers further argued that this anxiety made it difficult for the child who would not be allowed to develop at his or her own pace. Iris explained:

I find today that parents are really anxious and tend to compare the method that was used when they to school at five or six and they might forget the children are only three. You might find some parents coming into the school and say ‘my child should be writing his/her name’...Then you might find anxiety in that the parent might be a deterrent in the child’s progress. It might hinder the child from progressing in that they might want the child to move too fast.

Gloria contended that because parents “went through school learning mainly through chalk and talk and having to learn to write early and read early” they had similar expectations of their children. They explained that parents of some children who attended private nurseries before being accepted
into government nurseries and primary schools compared what the child did previously at the private nurseries with what was happening in the government nursery. They further noted that some parents often complained that the child sat quietly and wrote at the private nursery and they were not being allowed to do so in the government system. They noted too, that the parents questioned why no writing took place in the government schools. Wendy explained:

We find that there are situations where the children have already come from nursery school where they were writing. Yes, some come writing. Well they might not have got (sic) that far because they were young they have spent a little time at this nursery. And the parent would say, 'Oh she could do this and she could do that. These are private nurseries. So that when this child now comes into this school setting in the nursery setting, we who know what children of that age should be doing, and we say to them we are not writing or so, you know, they might begin to wonder. They may not say anything to you but they might be saying to themselves, 'well she was able to write her name and so on.

The teachers expressed concern for these views and expectations held by the parents and they shared their construing of the shortcomings that could result from these expectations. For example, Mertie noted that the expectations of parents, if followed by the teachers, would make it very difficult for under-fives in the classroom since they were not ready for such a Formal focus. Deborah noted that their expectations represented a very Formal approach to teaching under-fives who were too young for such a focus. In addition, she argued that a heavy Formal focus on literacy and numeracy at such a young age meant that the building of the social and emotional characteristics in under-fives were neglected at the expense of academics. Ruby and Lucille construed an Academic Focus as expected by the parents, as ineffective. They explained that given the age and development of under-fives the focus on literacy and
numeracy forced teachers to dominate and under-fives to become bored and frustrated. The other teachers further argued that when the parents demanded literacy and numeracy to be taught to under-fives then this resulted in the neglect of the individual and an emphasis on the whole class.

The teachers argued that when they used the practices they construed as focusing on the total development of the child some parents complained. Doreen spoke of parents sending messages such as, “the child went to school six week and it cannot write its name”. The teachers argued that all the parents needed to be exposed to information on what was best for under-fives. Veronica gave this example:

A parent may come to you and say that the child is not writing...but they do not understand that the child needs to develop the muscles. So these are the ways we can help the parent because we can instruct them in activities more or less.

They contended that when the practices they perceived as developing the whole child was explained to the parents there was often a change of attitude and parents accepted these methods. As a result of these shortcomings, the teachers said they acknowledged tradition and understood and tried to quell the parents’ fears. They argued the importance of the orientation programme with parents at the beginning of the school year at which goals and expectations are explained. This process of communicating, they noted, while not erasing the parents’ expectations of under-fives, helped the parents to understand the goals that they, the teachers had planned for under-fives. These teachers stressed that they believed the practices they construed as developing the whole child were needed in the education of under-fives and they would
not allow the pressure from parents to influence them into not using the practice.

Summary

The teachers construed the practices in relation to their perceived expectations of parents. They explained that they felt parents expected teachers to use practices that focused on cognitive development, and involving sitting and writing, as done in private nurseries. The teachers felt parents wanted a repeat of their own schooling experiences where chalk and talk were used. They contended that parents were in a hurry for their children to be made ready for the BSCCEE from an early age. The teachers noted a change in the attitude of most parents when the programme offered for under-fives was explained to them.

The expectations of teachers and administration

Sixteen of the teachers felt that the expectations of the administration and other teachers, whom they said they referred to as “some people”, had an influence on their use of the practices with under-fives. The general view shared among the teachers was that before the ECE training courses the emphasis for all the children in the school was literacy and numeracy via practices that focused on learning by rote. These teachers contended that the expectations of the administration and the other teachers were quite similar to those held by the parents.

The teachers’ views on the expectation of the administration was also illustrated by Ruby who told of her experience with an education officer who visited her class of under-fives and asked “Can your children write their
names?" She felt that this attitude inferred that under-fives were expected to be taught to read and write. Gloria told a story of a principal who came to her class to test under-fives. She described the test as oral conversation and one in which the children were tested in terms of their academic achievements. The teacher explained that principal's "test" was "can you count to twenty?" And she let the class count and the class counted to twenty. Then she went through the colours with them, "and she asked to them to spell words". She noted that based on the responses of the class the principal finally said to her that the children had been taught. Audrey expressed the view that in the initial stages of nursery education in her school "children where brought into the school at three... and were exposed to all the Formal work, all the academic work, the paper work and so on". She felt that the "administration and others" accepted these practices because of the lack of awareness of what was "important and necessary" in the age group.

Six of the sixteen teachers contended that the reaction of other teachers made them very aware of the need for Teacher Directed, Formal, and Whole Group approaches in terms of class control. For example Doreen, Gloria and Deborah explained that teachers of older age groups in nearby classes complained about the noise level in their classrooms with under-fives when they used practices such as Free Choice, Child Initiated, Informal. These teachers explained that they preferred these practices with the teacher acting as guide but expressed frustration at having to use practices such as strict Teacher Directed, Formal practices in order to keep the children quiet. Doreen explained why:
And like when you are doing certain activities, the children would be say, noisy, livelier. Then people (other teachers) would send a message and tell you the children keeping to much noise. That really gets to me!

Gloria expressed her awareness of the high noise level created by under-fives and the complaint of the principal over her lack of noise control. She noted that she felt “that the children should be able to express themselves” but it was up to the teacher to “keep the noise level down”. She felt a Teacher Directed approach could then be used at this point, but the role was that of guiding and not dictating.

At least seven teachers argued the discrimination they perceived from the teachers at the next level against a class taught via practices that they perceived as focusing on the total development of under-fives. They argued that these teachers seemed to expect that under-fives should have been taught via traditional practices such as Formal Whole Group, Academic Focus and Separate Subjects. When they observed that these practices were used on a limited basis the teachers argued that these teachers at the next level expressed the view that the last teacher did not “do anything” with the class. Doreen shared her experience with this type of discrimination and the thinking that under-fives “were not good enough” for the top class in the next age group and as a result they were placed in the second level in terms of streaming by ability. Deborah also highlighted this act of discrimination against a class. She noted that teachers at the next level initially objected to a de-emphasis on the academics and inquired about the “foolishness” that was being done with under-fives. She felt that the teachers' attitudes were based on the fact that they “were accustomed to teaching under-fives in the same manner in which
the five year olds were being taught, 'chalk and talk, learn the ABC by rote, learn your numbers by rote, repeat them everyday,' you know, that kind of teaching”. She noted that the teachers were probably wondering how the children could be taught without “writing on the chalkboard or repeating the letters”. She described the resistance in terms of the teachers at the next level not wanting to teach the class because they felt that the children did “not know anything”.

Five of the seven teachers noted that in recent years, they detected a change of attitude from the administration and the other teachers towards the de-emphasis of literacy and numeracy via traditional practices that focused mainly on the cognitive development of under-fives. They noted that this change of attitude was important since as was explained by Carmen, the people in administration made the decisions in terms of the methods to be used and what should be taught and the teachers followed the rules. Carmen said she observed, as did most of the other teachers that in the last five years teachers had “some flexibility where you can do things on your own, you can initiate things but no radical changes to policy”. In addition, Deborah noted that the teachers at the next level were now “begging” for classes where under-fives were taught with less of Academic Focus, Formal practices with an emphasis on literacy and numeracy and more of the pre-requisite skills and the development of the whole child. Deborah concluded that the change in attitude was because the teachers realised that the children from her class were “very disciplined, ...well mannered, (had) good work habits, good work attitudes, you gave them a task and they will complete it and they will be
looking for more". She concluded that the teachers realised that the children had good foundations for further cognitive learning.

The general consensus among the teachers was that these significant others had expectations for under-fives and these often clashed with that held by the teachers themselves. The teachers spoke of the pressure they felt in terms of the way under-fives should be taught and what they should be taught. They explained that if they yielded to the pressure to develop the cognitive aspects of the child then they would teach via practices such as Academic Focus, Formal, Whole Group and Separate Subjects. The majority argued instead that based on they training they realised the need to include practices such as Integrated Approach, Child Centred, Child Initiated, Informal, Small Groups and Individually in their classrooms.

Summary

The teachers explained that before courses in ECE, teachers and administration accepted an emphasis on literacy and numeracy via chalk and talk, and rote learning of the alphabet and numbers. After the courses they noted their unwillingness to accept new ideas for teaching under-fives. They highlighted complaints about the noise level, and discrimination against classes taught via practices perceived as focussing on the total development of the child. Some teachers spoke of the change of attitude of teachers and administrators when they realised that the children taught via practices that focused on their total development were disciplined, mannerly, and had good work habits.
Traditional BSSCEE

The general consensus among the teachers was that the desire to teach under-fives to read and write via practices that focused on the child's cognitive development was based on an education system and an administration which demanded that a child be ready to take the BSSCEE by age eleven. Ten of the teachers also made a link between a *Formal, Whole Group, Academic Focus* approaches and BSSCEE. Diana felt that these approaches were used by teachers who were "gearing the children, albeit from a young age, towards this examination taken in class four when the child turned eleven.

Three teachers argued that the practices focussing mainly on cognitive development were means to an end. They noted that the schools wanted good results and practices such as *Formal* and *Academic Focus* were used to achieve this goal. These teachers further speculated about what they deemed as added pressures to teach for the examination. They based their surmising on the proposed change explained in the White Paper on Educational Reform (Ministry of Education, 1995) that will allow primary school children to take this examination from as early as nine years old. The teachers explained that this shift came about because of a change in emphasis from "age" to "ability" in terms of children qualifying to take the BSSCEE. The teachers further explained, and the White Paper on Educational Reform confirmed that prior to 1996 this examination was taken in the year a child turned eleven years old. Some teachers felt that with the change in 1995 which allowed children in 1996 to take the BSSCEE from as early as nine, teachers may "push Formal teaching from the nursery" so as to have "a smart child" ready for the
examination by age nine. Five teachers were of the opinion that the pressure may come mainly from parents and others that wanted to see a particular child or schools excel. Mary explained:

Parents are going to have this at the back of their minds. And I believe eventually that people are going to want you to pick up speed even at this very tender age. So I believe that a little further down the line people may want to see you doing more Formal work in the three to five age group. Even although I do not advocate it I believe a time may come when this may happen.

Angela also felt that there might be an impact in terms of “pushing the young child”. She posited this view:

It would mean you are going to push children ... right now there are some children who are pushed for the eleven plus exam. And it is going to become even worse because they are some people who want their children to go ahead just to say, ‘well my nine year olds are writing the Common Entrance’. They may not be ready but just to have my school up there, or whatever, they are going to push them, which is detrimental to the children.

Carmen acknowledged that some teachers felt compelled to use a Formal, Academic Focus from as early as age three. She felt that it was because of tradition that teachers felt that in order to prepare children for the BSSCEE there was a need to focus on literacy and numeracy from the moment the child entered school, regardless of the age. She maintained, as did the others that instead of focussing on “chalk and the talk and the book” teachers needed to begin to focus on the experiences that the children brought to the classroom. The teachers agreed with Carmen that there was a need to “stress the manipulative aspect, but try as much as possible to bring out all the innate activities and thinking and thoughts of these little children”. Carmen in noting
the importance of starting where the child was at, and building from there
explained the thinking of the child who enters the classroom for the first time:

Nowadays they are not coming with much academic background but yet they can tell you everything that shows on television. And if we use that means to get them to bring out their ideas, and develop these ideas, then I think that is where there should place sure emphasis.

Five teachers also highlighted the traditional way of acknowledging a teacher’s success. Gloria noted that the teacher’s ability was measured “by what the children know”. This view she explained was reflected in the children’s success in the academics, that is, the ‘high marks’ their acquired on the 11+ exam or the BSSCEE. She concluded that as a result of the educational focus she “spent some time every day on the academics”. Veronica shared similar insights with the argument that Academic Focus was a consequence of the BSSCEE and that schools were judged by the results of this examination, that is the number of children receiving high marks at the particular school. She said “With the Common Entrance now hanging over the school’s head, because it is hanging over the school’s head, your school is judged by your results, this resulted in the teacher focussing on the academics from the time the child comes to school”. She argued that as a teacher you then “formalise the classroom and you direct it in ways you want it to go.” The focus on the academics, she continued in her argument, resulted in the child becoming an “academic illiterate” by age eleven. Veronica explained academic illiterate to mean the child “may be non creative, it may not have powers of deep thought, it probably, maybe only able to record information and reproduce it, but when it comes to thought... nothing!” In concluding she argued:
An **Academic Focus** takes away the child’s creative thought and for the non-academic child, it makes it feel not worthy - ‘I am not writing as beautifully as the other children in my class so I am worthless’. And then the child creates that low self-esteem, it would not be able to find beautiful things in itself, or good things in itself to make it a better person Veronica.

Diana too highlighted some of the consequences of using an **Academic Focus** and concluded by noting it was the reason some children were not succeeding in the system. She shared her views on this line of thinking:

Because of the way the education system is structured, I think teachers tend to believe that they have to teach, let say for the eleven plus. So from the time the child comes into school, the focus seems or is usually on this getting the child to write. And as soon as it can write well, let me get it to do Maths and English. Always in the back of the teacher’s mind is the idea that we have got to get these children doing X amount. I am finding or have found that because the teacher’s teaching is focused on this Common Entrance exam, we find that we have a lot of delinquents in school. A lot of children are left out because they teach subjects rather than children.

Diana, like the other teachers felt that the system controlled to a large extent, they use of the practice when teaching under-fives.

Three teachers also argued the opposite view expressing the opinion that the taking of the examination at an early age will have little or no impact on their teaching of the children. For example a teacher in a rural school illustrated this point. She felt that there were very few “bright” children at this early age so there would be no impact. She puts it this way:

It (writing the BSSCEE from as early as nine) should not impact very much down here.... I have met bright children, but very bright children are few and far between. They are very few children at the nursery or reception stage that are so bright as to say they could do Infants B (6-7 years) work.
Ingrid also shared the view that no pressure will be placed on the classes with under-fives because writing the BSSCEE at an early age was similar to what happened years before. She explained:

It should not have an impact on nursery because years ago they were sitting the exam at an early age. When I was going to primary school you could sit it at nine and you went on. I do not see it having an impact down here because I am not going to push anybody any harder.

Gloria posited the view that the writing of the BSSCEE at an early age meant that the principals did not have to focus so much on the examination and getting the children ready by age eleven. As a result she envisaged a situation where there will be less Formal teaching and the children can “have time to learn” instead of being over worked for the examination. She explained:

They have the opportunity to let the children develop better at their own speed and therefore their learning would be much better and deeper, rather than pushing these children and getting them brain dead, tired, burnt out by the time they reach class 4 to pass the eleven plus exam so their school would look good.

Summary

The practices were construed in relation to the BSSCEE known locally as the common entrance examination to secondary schools. They explained the pressure felt to have children ready for this examination by age 11 and the push to use practices focussing mainly on cognitive development. They speculated about the future use of practices focussing on the total development of the child in terms of the shift in policy from the taking of the examination at age 11 to as early as nine years old. They argued too that success in this examination was often an acknowledgement of the teacher's ability to teach as well as the school's ability to produce "bright" children. Some teachers linked failure by some children at the end of primary education to the use of
traditional methods of teaching that focused on cognitive development and achievement. The consensus among the teachers was that the BSSCEE should not be a factor that influenced their use of the practices with under-fives.

**Summary of Traditional academic focus**

The teachers seemed to have construed the practices in terms of conflict between practices traditionally used and knowledge of other practices exposed at early childhood training courses. The teachers construed the practices from the stance of the parents' constructions, other teachers and administration and their perceived expectations, while explaining how these conflicted with their own views. The parents were often construed as anxious and desiring the use of some practices that focused on the cognitive development of under-fives, for example the teaching of literacy and numeracy. The teachers felt the parents wanted under-fives taught via the same methods that were used when they were at school. They explained however that the orientation programme at the beginning of the school term helped in terms of exposing parents to the expectations of teachers. They also construed the teachers and administration as wanting under-fives exposed to practices traditionally used for preparing under-fives for the BSSCEE. Some teachers argued that the results of this examination were often used as a measure of a teacher's success. They felt too that some teachers thought that practices that focused on the cognitive development of under-fives were the best way to teach. Practices perceived as focussing on the cognitive development of the child such as *Whole Group, Formal, and Academic Focus*, were also construed as a means of aiding the teacher in preparing for formal schooling. On the other hand those perceived
as focussing on the total development of the child for example *Child Initiated, Child Centred, Free Choice, and Informal* were construed as increasing the noise level and lack of class control. Some teachers argued that their classes were initially criticised by teachers at the next level but they noted that over the years they have detected a change in attitude and a greater acceptance of under-fives. The teachers all contended that there was a need for a change in attitude in terms of the inclusion of practices that developed the whole child.
Teacher’s versus child’s dominance

This section presents the teachers’ construing of the interviews coded and presented as "Teacher’s versus child’s dominance". The findings are presented under the sub themes (Table 14) Teacher’s dominance, The role of the child, Changing attitudes to the roles of the teacher and child. Summaries of the teachers’ interviews are now presented under each of these themes.

Teacher’s dominance

Most teachers construed a Teacher Directed approach as needed in the total development of the child, but explained that the role of the teachers should be that of a guide, helper and facilitator of learning. For example, Veronica felt that the role of directing the child was necessary since the child needed to be “moulded”, that is, the teacher needed to “help fashion their thoughts”. This role meant, she explained, that the teacher must direct and decide how to develop the child to his or her full potential. Maureen who argued that given the short attention span of under-fives, the teacher needed to give directions to the child and also suggested the need for the teacher to play the role of decision-maker for under-fives given the age of the child.

Nine of the teachers also argued that Teacher Directed approach was needed in order to achieve goals in their classrooms. For example, while explaining her acceptance of Teacher Directed approach, Maureen argued that she had “goals set for the children” and achieving these goals meant that the practice was needed in the classroom. She noted that teachers knew where
they wanted the children to be and this to her “meant that they must direct the children at some time during the day”.

*Teacher Directed* was also construed as a practice that helped under-fives to complete a given task. For example Deborah and Ruby argued that many of them were easily distracted and moved away from the given task before it was completed. The habit of not staying with the task until completion, they continued, resulting in the development of poor work habits in the future. To develop the habit of staying with the task, these teachers indicated that they believed the teacher needed to direct the child in what must be accomplished. Their views were summarised by Ruby, who felt that under-fives were new to the environment and needed the guidance given their limited classroom experiences.

Another view, which was highlighted, regarded *Teacher Directed* approach as related to the issue of class control. Sheila and Audrey explained that when under-fives were directed they were given fewer opportunities to get into mischief. They contended that because the focus was on schoolwork, under the close supervision of the teacher there was an increased chance for learning to occur. In addition this method of teaching, they argued, prevented chaos in the classrooms. They shared their views. Sheila said “I think that the teacher should have a hand in directing the children instead of leaving them to do as they like which might only lead to chaos and confusion”. Audrey said “You have to direct them at some point in time, to guide them, not to be a dictator but to direct them, because if you do not do this you might find that chaos will develop”.

Four other teachers agreed that without a *Teacher Directed* approach, the classroom would become a disorganised place where the children do whatever they wanted. They noted however that in accepting a *Teacher Directed* approach in classroom management, the role of the teacher should be that of a guide or facilitator to the children in the classroom. Carmen too contended that the role should be that of a guide and "not that of instilling your philosophy on the child".

Nine of the teachers argued for the inclusion of *Teacher Directed* approach because of the opportunities given to the teachers to focus on and involve the individual. Mary noted that because the teacher was in control then he or she could be flexible in the given situation. She explained that under-fives waited on the teacher for instructions and because the teacher could be flexible then the opportunity to move freely could be given. She too felt that when a *Teacher Directed* approach was used, the teacher still needed to have the child at the centre of focus during the process of directing. She described the situation where teachers planned activities that they themselves liked or felt confident with, or felt would bring out the best in themselves as teachers. They give little thought, she argued, to whether or not the activity was suitable for the level of the child, or if the child understood and had mastered the concepts. She summed her knowledge, based on her experience in this remark:

There are times when *Teacher Directed* activities do have a place in the early childhood classroom, but... I believe that when a teacher is directing an activity it should be geared towards the children, and the teacher should have a clear focus as to what he or she wants to get across to the children.... And even although the direction is now coming from the teacher, there should be opportunities for the children to participate.
The other teachers argued similarly, sharing the view that when the practice was used it should focus on under-fives.

Wendy was among the twelve teachers who said they did not approve of the practice. They too, felt that it could be used but that the child should be the focus in the *Teacher Directed* classroom. Wendy argued that when using this practice the teacher had to offer the children experiences that would hold their attention. She explained:

> When a teacher is doing the work she has to make sure she has the children in mind, and because some children like to do their own thing. As teachers we have to come with something new and forceful so their interest would always be there and much learning will take place.

Diana too, argued against the use, of the practice maintaining that she used the practice only because of the large class she taught. She argued that when the practice was used in a *Whole Group, Formal* environment, the practice did not motivate the children in the classroom and some of them did not respond during these lessons. Brenda argued that “some lessons lend themselves to *Teacher Directed* sessions”, for example Health and Social Studies, since the teacher did a lot of explaining. She argued however that she did not approve of the practice because it focused on telling the child instead of motivating under-fives to find out more on their own. The general consensus among these teachers was that despite their disapproval they settled for the use of a *Teacher Directed* approach with under-fives because of these opportunities it provided.

Carmen described the “loss of independence” as occurring within large classes of children in early childhood classrooms where a *Teacher Directed* approach was often used. Carmen noted that under-fives should be given the opportunity to make choices “because we are living in a world now where
from very small we have to teach them to be independent. Veronica also explained the need for independence and the way it conflicted with a Teacher Directed approach:

I find that in your directing them you take away their independence. Because they need to learn, they need to explore and learn all part of exploring and using their creative wits and learn new methods and things and new ways.

Some teachers explained their dislike of a Teacher Directed approach in other practices that focus on cognitive development. For example Angela noted that she "did not like" a Formal approach “because the Formal teaching to me is more like a teacher dominates everything”. She further felt that because the teacher dominated, then there was a tendency to “stick to one area” and this resulted in “cutting out the enjoyment of the lesson”. She felt that the teacher in such a setting did not deviate from the topic and there was a need, when teaching these young children, to move to areas not planned. As an example, she noted that “sometimes you might know you start to teach or talk about that bag and something is going to come in that is going to send you off the bag, but it is related to the topic”. Joan felt a Formal approach was “teacher oriented”. She reflected on her own learning experiences in the classroom, recounting that “you just sit there and the teacher just throw it at you, feed it at you, rigid, and where you cannot do it no other way”. Gloria also shared the view of Formal teaching as a teacher-dominated practice. She argued that a Formal approach was not appealing to the children because that was what the teacher wanted and “not what the child wanted to do”. Audrey also objected to the practice, describing it as “teacher presentation” that
provided the teacher with the opportunity to show off skills, and often the child was not considered.

Summary

The teachers construed the role of the teacher in terms of catering for the total development of the child. The general consensus among the group of teachers was that a Teacher Directed approach if used as teacher as the boss and dictator, detracted or took the focus away from the child. For this reason, most teachers recommended the use of teacher as a guide, director and facilitator in practices used in the development of the total child.

Role of the child

The majority of the teachers contended that there should be a sharing of roles between the teacher and the child inferring that some form of democracy and compromise must exist in the classroom. Doreen felt that the child should be allowed to make decisions in the classroom in terms of the choice of activities. She said:

Sometimes Teacher Directed exercises can be vital but at certain times you have to allow the children freedom of choice so as not only to do what teachers say. The children should have freedom of choice to do certain things. For example, they can select an activity from the learning centre instead of teacher telling them take this or take that.

Iris explained that freedom to choose in Free Choice sessions, if it was to be effective, had to be within the control of the teacher. She however explained the problems involved in the teachers always choosing:

The teacher should not always have to direct this particular area with this particular activity whether the child likes it or not... You will find that when you choose for the child, the child might become frustrated and bored and give up easily, or that particular child might fall asleep during that particular activity because the child does not really like it.
Deborah, highlighting the importance of shared roles in the classroom summarised it in these words “I believe that the children should have a role and the teacher should have a role. But the teacher should not be in total control of everything that is said and done in the classroom”. Maureen also contended that there was room for the child to be involved in what is happening in his or her education. She described a situation in which there must be a compromise.

The teacher might want a child to, let say, go and thread or lace a card or something like that. The child for some reason might not be keen on doing that. It has to work both ways. The teacher has to monitor the situation and find out how the child is feeling because the children cannot always decide for themselves.

Diana made a similar point and noted that teachers tended “to think that it is what they have in mind for a child rather than what the child wants”. She expressed the view that the teacher should take time in the morning to find out what the children are interested in and then try to meet their needs for that day or during the course of the week. She explained the reasoning underpinning this view:

I have found that children go through the school and they may not be academically inclined, but there are things that the children can do that we the teachers never really find out because we do not think of what is really interesting to the child. We think of what we think the child should do.

These teachers, in emphasising the role of both the teachers and the child in the classroom, felt that the teacher as well as the child benefited from the sharing. Deborah argued that the teacher was able to hold the interest of the child, and if the child was allowed to select a particular task he or she will show interest and “will work on the task until it is completed”.
Four of the teachers expressed the view that in practices such as a *Child Initiated* approach under-fives should have a part in the selection of the topic. Carmen, like Deborah, suggested that one way of gaining information from under-fives was during the first session in the morning where the teacher could make an inquiry concerning the interest of under-fives for that particular day. Four other teachers highlighted the lack of this kind of input by under-fives in terms of deciding what should be taught. These teachers argued that based on their experiences, they realised that there were topics for which under-fives showed greater interest. Yet, as Joan argued, teachers were expected to teach the same topic set out in the curriculum in the same sequence in a given term. She explained:

> Last term it was ‘Myself and I’, and again, again before I think of this, every first term you do ‘Myself and Others’. I was saying but why can’t we do something else? Why must we start always with Myself and Others? Why ‘Myself and Others’ every single first term?

She, like the four others, wondered why under-fives were not given the opportunity to suggest topics for units of work. She contended that even though she was told that it was necessary to start teaching the children about themselves, it was only used because teachers were “comfortable with this topic” and they felt “this is what should be done”.

Gloria shared a similar view and described the way she felt under-fives should be allowed to initiate and develop a discussion. She also noted the conflict between the teacher and under-fives that may result if a teacher wanted to have full control in terms of the direction in which the lesson should go. She said:
I’ve had an experience where I was absent and somebody had to take my class and I left work for the person to do. I left a picture for the children to do composition. We had talked about pets. The picture was on ducks, just ducks, a mother duck with its seven ducks, count the duck, you know, talk about the colour of the picture. That’s all I basically wanted done. Apparently the person wanted a lot more and they got really concerned because the children started talking about, they talked a bit about the ducks, yes, then they went on and they talked about what they had at home, the animals, which they had at home. And the person thought the children were very undisciplined not to be focussing on the duck. And to me that is exactly where I would have wanted the lesson to go, the children to talk about what they had at home, and the animals they had at home. And the person got very upset because the children were not disciplined.

She felt that during sessions like these the opportunity should be taken to use the “children’s talk to help correct the language and develop their skills”.

Diana shared the view that the lack of input from under-fives was related to the way some of the children “turned out” at the end of their primary education. Diana explained that she shared great concerned for some of these children who were often referred to as delinquents. She argued that a Child Initiated approach, which allowed under-fives to have inputs in the selection and discussion process, would be of benefit to the child in the later years of schooling. She explained:

We have a lot of children who we term delinquent but if you are interested in finding out about the children you will find that there are lots of things that will interest them. And if somebody had taken the time with them from small to find out what had interest their child maybe he or she would not have been delinquent.

Veronica too argued that the teachers gained in terms of planning interesting topics that were derived from the child. Ruby compared her planning before the course when she had to cover the topics suggested in the syllabus to after the course when she began to allow an input from the children. She, like four other teachers, noted that input from both teachers and under-fives in all of the
practices resulted in a better classroom atmosphere than when the teacher dominated.

**Summary**

The teachers construed the practices in terms of the role the child played during the implementation process. They suggested the need for some form of democracy and compromise. They felt that the needs and interest of under-fives should be elicited, allowing them to make a contribution to the selection and planning of topics. Diana contended that delinquency might be linked to a lack of input by the child. Others argued that teachers gained, for example, a better classroom atmosphere, when the child was allowed input in what was to be taught.

**Changing attitudes to the roles of the teacher and child**

The teachers admitted that the involvement of under-fives in planning and initiating ideas was new, but the majority supported their involvement. They argued that the days of teachers dominating the classroom were fast becoming an activity of the past. For example Ruby, from one of the rural schools, questioned the focus on the teacher in a *Teacher Directed* approach, when under-fives were the ones being taught. She said:

> If you are teaching children, why should it be teacher centred? It is not for you, is it? It is for the children. It is not for you. You have done your learning already, it is for the children. So you use whatever experiences or whatever would make it interesting for the child.

Some teachers described the way the teachers can be involved in practices that were construed as focussing on the child. For example fifteen teachers stressed the importance of the teachers’ presence in a *Free Choice* approach. Deborah said "The children will be allowed to select their activities,
but you have to work along with them and give them guidance and encouragement". Mary said:

> Even although they are free to choose their activities at that point in time there is still teacher interaction. The teachers are still there, there to help them if a problem arises, if they need any clarification in concepts and that kind of thing....  The teachers are still there to make sure that things run smoothly, that the children do not get into any misconceptions, that ideas are clarified that vocabulary is extended and that sort of thing.

**Summary**

The teachers construed the practices in terms of the roles played by the teacher and under-fives. They argued that there were some practices in which teachers play a dominant role and the child was expected to sit and learn. They suggested that the teacher should be involved in practices which they considered as focussing on the child since this involvement may be beneficial to both. They explained that when the child is allowed to express his or her thoughts then the teachers discovers the topics in which the child has an interest and this helps to make planning more meaningful. There was general agreement among the teachers that there were benefits to be gained when the teacher and under-fives were involved in the practices in the classroom

**Acceptance of teachers' roles and knowledge**

The teachers indicated the importance of the Ministry of Education consulting with them about what was needed in the education of under-fives. The teachers' acceptance of the practices construed as developing the whole child suggested that their classroom experiences were critical to policy implementation. Ruby epitomised the position of all the teachers concerning
the input and role they played in implementing changes in the classroom. She said:

Do you think that before the Minister of Education went into the Ministry she knew a lot about teaching? She might have background knowledge on how she was taught in school, but do you think that she knew anything about the day to day working of the school? I do not think that somebody who does not know about the children and teaching can just up one morning and say, 'do a, b, c,' without asking the teachers. Even if they read it up I would still have to ask somebody that was teaching. Let us face it, if they want to implement anything with the teachers and do not ask teachers, how they are going to implement it? How are they going to get the teachers to implement it?

Their resistance to change was reflected in comments made about the top down fashion in which policies were designed and passed on. Wendy expressed it this way:

It should not be the situation where things are handed down and expected to be adhered to slavishly, no, because we are the ones in it and we should have a part.

The views of the teachers was typified in the comment made by Carmen who said:

They (Ministry of Education) are the policy makers and they are the ones who are making the policies but if they do not come into the classrooms or talk to the teachers to find out what the teachers are experiencing then we are always going to have problems.

**Summary**

The teachers all agreed that since they implemented practices in the classroom, their views based on their experiences in their classrooms, should be considered when improving the education of under-fives.

**Summary of Teacher's versus child's dominance**

This theme was discussed under four emerging sub themes, Teacher's dominance, Role of the child, Changing attitudes to the roles of the teacher
and child and Acceptance of teachers' roles and knowledge. The teachers contended that in the past teachers dominated in the classrooms while children sat quietly and listened. They identified the problems associated with a teacher-dominated classroom. The teachers also construed the role the child should play in the classroom. They argued for the involvement of the child in terms of the teacher eliciting ideas and the interest of the child. The teachers construed the change in attitude in terms of the role of the child and that of the teacher. They explained that the child needed to be involved and that the role of the teacher was to interact and help with problems as well as to clarify ideas and generally ensure the smooth running of the classroom. The teachers agreed and that given their role and knowledge regarding practices used with under-fives, their views should be considered when aiming to improve the education offered.

Summary of the chapter

This chapter presented the teachers' personal practical knowledge about the pedagogic practices in the education of under-fives under five major themes and emerging sub themes within these major themes. The first section of the chapter dealt with the teachers' construing of the Consideration of the Child. The teachers presented their personal practical knowledge about the practices in terms of their perceptions of under-fives, the home environment from which they came and their school environment to which they go. They construed under-fives in terms of their social, physical, emotional and cognitive development while maintaining the need to use practices that catered for these areas. They also highlighted the shortcomings of the home
of the home environment and the need for under-fives to be in school. The importance of a school environment, which catered to the needs of under-fives, was also stressed. The teachers explained that they felt that because most parents worked they needed care for under-fives. They argued that some caregivers in the home environment did not always set the right examples for under-fives. They argued that the school environment provided the opportunities to develop the whole child under the care of trained teachers. In addition the teachers outlined the conditions that should be in place before under-fives were accepted in schools. These included provisions of suitable facilities, materials, resources, trained teachers, flexible programmes, the elimination of disparities between nursery and primary or infant schools, a decision about half day or whole day for under-fives, and improving the teacher to pupil ratio.

The next section presented the benefits of the practices to under-fives. They contended that the practices benefited in areas such as monitoring the child's progress, developing under-fives' initiative, building their self-confidence, preparing them for life, helping the child to express creativity, holding the interest of the child, allowing for greater participation, better class control and less boredom and identifying topics of interest to the child. In addition the teachers were noted as benefiting in terms of planning and holding the interest of the children.

The teachers' construing of the practices in terms of their classroom experiences was presented in the third section. They identified the contextual problems that affected the use of the practices as well as the lack of resources
and materials. The teachers also contended that teaching large numbers meant that some practices could be used while others were difficult to implement. They also argued that practices that seemed to focus on cognitive development were often used in order to cover the syllabus and took little consideration of the child. They also highlighted the way under-fives were affected by the use of the practices. The teachers identified two kinds of Parent Involvement in the education of under-fives. These included parents as supporters and informants as well as involvement in the classroom. All the teachers indicated the need for Parent Involvement in the education of under-fives. The teachers accepted the need for the parents to be supporters and informants. They noted that when the teachers were kept informed about any problems the children might be facing then teachers better understood the children in the various classroom situations.

Communicating information to the parent was also construed as a means of the teachers gaining support and help from the parents in terms of materials, time and talent. The teachers noted the need for parents to be helpers in the classrooms and noted the importance of parent education programmes and training before they were allowed in the classrooms. They noted the problems involved in having parents present, highlighting the effects on under-fives as well as on the parents and the teachers. They also noted the advantages of parental involvement to the teachers with large classrooms and those who lacked certain skills like art and craft.

The next section presented the teachers' construing of the practices in terms of a traditional academic focus. The teachers argued that practices that
focused on the cognitive development of the child were those they used before training in early childhood education. They contended however that parents, administrators and teachers still felt that these practices were best, especially since they served to prepare children for the BSSCEE. The teachers highlighted the conflict between their views on the use of the practices as opposed to those held by these significant others. They argued from the perspectives of the parents, teachers and administration, while noting their beliefs about a traditional focus. They stressed the need to expose parents to training and for the continual use of the practices that developed the whole child. They explained that in recent years there has been a change detected in a few schools in terms of accepting under-fives who have been mainly taught via practices that catered to their total development.

The final section of this chapter dealt with the dominance of the teacher or child when the practices were used. They maintained that practices such as Formal and Teacher Directed meant the teacher tended to dominate, but felt that this practice needed to be changed. They pointed to the need to involve the child as well as the teacher in the classroom forming a partnership in education. They felt that the teacher and the child benefited from this relationship since the teacher could elicit ideas from the child and as a result hold their interests in these particular areas.

Conclusion to the chapter

This chapter presented the findings from the in-depth interviews with the twenty-one teachers. It highlighted the richness of the data obtained using depth interviews based on the elicited constructs derived from the repertory
the seventeen practices suggested some focused on the child and its total
development and others focused mainly on the child's cognitive development.
Their construing seemed to suggest that *Child Initiated, Integrated Approach,*
*Child Centred, Informal, Free Choice, Individually, Small Groups, Real Life
Objects, Structured, Parent Involvement* and *Concrete* focused on the total
development of the child. Where as practices such as *Separate Subject,*
*Academic Focus, Whole Groups, Abstract, Formal* and *Teacher Directed*
focused mainly on the cognitive development. The teachers' personal practical
knowledge about the practices was presented under five major themes that
emerged from the analysis of the elicited constructs. The findings presented in
this chapter will be discussed in the next chapter.
CHAPTER NINE
Discussion of Findings:
Answering the Research Questions

Introduction

This chapter collates the findings from the survey (Chapter Five), grid interviews (Chapters Six and Seven) and the personal practical knowledge from the in-depth interviews as derived from the 21 teachers who participated in the study (Chapter Eight). It brings together the research findings and answers the research questions posed at the beginning of the thesis. These include the main research question:

- How do Barbadian teachers construe their personal practical knowledge about the advocated pedagogic practices used in the education of under-fives? The subsidiary questions are:
  
  - What are the teachers' elicited constructs and what do they imply about the advocated practices used in the education of under-fives in their teaching contexts?
  
  - What are the associations and implications between the grouped constructs and elements or practices?
  
  - How do the teachers construe the meanings of the advocated practices used in the education of under-fives?
  
  - What underlying factors compose their personal practical knowledge about the advocated pedagogic practices and how do these influence their use in the education of under-fives?
Presentation of findings

This chapter has six sections. The first four sections present answers to the subsidiary research questions in the sequence given above. These are followed by a discussion of the findings in terms of previous research, the literature review and the theory and methodology used in the study. The chapter closes with a review of the findings, thus answering the main research question.

Elicited constructs and the implications for pedagogical practices

This section answers the research question:

• What are the teachers' elicited constructs and what do they imply about the advocated practices used in the education of under-fives in their teaching contexts?

The findings from the repertory grids suggested:

• The constructs elicited from the 21 teachers focused on five main categories or themes. These included: Consideration of the child, Benefits to under-fives, Classroom experiences, Traditional academic focus, and Teachers versus child dominance. These categories suggested that the teachers construed the practices from a variety of perspectives, implying individuality and similarities in the teachers' construing and an eclectic view of the practices.

The association between the constructs and the elements

This section answers the research questions:
What are the associations and implications between the grouped constructs and elements or practices?

- The analysis of the associations between the grouped constructs and elements presented on the principal components maps suggested that the elements or practices were associated with the constructs in two main ways:
  (1) Practices focussing on the total development of under-fives, that is, their physical, social, emotional and cognitive development; and/or
  (2) Practices focussing solely on the cognitive development of under-fives.

- These associations implied that the teachers construed the practices from principals of pedagogy derived from theoretical and/or culturally empirical perspectives. Table 15 gives a summary of the way in which the teachers construed the practices.
Table 15

The teachers’ construing of the pedagogic practices used in the education of under-fives

<table>
<thead>
<tr>
<th>Practices construed as focussing on the total development of under-fives</th>
<th>Practices construed as focussing solely on the cognitive development of under-fives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Initiated</td>
<td>Separate Subjects</td>
</tr>
<tr>
<td>Child Centred</td>
<td>Academic Focus</td>
</tr>
<tr>
<td>Informal</td>
<td>Whole Groups</td>
</tr>
<tr>
<td>Free Choice</td>
<td>Abstract</td>
</tr>
<tr>
<td>Individually</td>
<td>Formal</td>
</tr>
<tr>
<td>Integrated Approach</td>
<td>Teacher Directed</td>
</tr>
<tr>
<td>Small Groups</td>
<td></td>
</tr>
<tr>
<td>Concrete</td>
<td></td>
</tr>
<tr>
<td>- Real Life Object</td>
<td></td>
</tr>
<tr>
<td>Structured</td>
<td></td>
</tr>
<tr>
<td>Teacher Directed</td>
<td></td>
</tr>
<tr>
<td>Parent Involvement</td>
<td></td>
</tr>
</tbody>
</table>

Construing the meanings of the practices

This section answers the research question:

How do the teachers construe the meanings of the advocated practices used in the education of under-fives?

- They construed:

  *Child Initiated* as allowing the child input in terms of initiating action or ideas in the classroom.
Child Centred as focussing learning on the development and needs of under-fives.

Informal as opposite to Formal and as removing formality via the removal of furniture and providing opportunity for freedom of movement and manipulation of materials and activities.

Free Choice as granting under-fives total freedom in the selection of activities or partial freedom with the teacher having some measure of control in the selection of activities.

Individually as focussing on individuals in the classroom but they differed on the way this should be implemented. They construed the practice as either working with "weak" children in small groups or working on a one-to-one basis with the individual child.

Integrated Approach as opposite to Separate Subjects, and as focussing all the subjects areas around a particular topic.

Small Groups as dividing the whole group into small groups and working with each group or individuals in the groups.

Concrete as providing under-fives with the opportunity to manipulate objects and materials in the classroom.

Real Life Objects as providing activities, people, experiences, objects and other materials for manipulation and visualisation.

Structured as the sequencing and organisation of either the daily timetable or a lesson and activity.

Teacher Directed as either that in which the teacher was in total control (then it focused on developing the cognitive aspect of the child), or as
focussing on the total development of the child when the teacher acted as a facilitator and guide in the learning process.

*Parent Involvement* as either allowing the parent full involvement in the classroom or as the support and help offered to the child at home.

*Separate Subjects* as opposite to an *Integrated Approach* and as teaching one of the subjects and then moving to another subject and teaching another topic.

*Academic Focus* as teaching the 3-4 and 4-5 year olds literacy and numeracy, that is, teaching reading, writing and number recognition to these age groups, but at varying levels and details.

*Whole Groups* as teaching the entire class the same lesson at the same time.

*Abstract Material* as the opposite of *Concrete* and *Real Life Objects*, and as using the imaginations of under-fives to think or reason about concepts and ideas being taught.

*Formal* as the opposite of *Informal* and focussing on the children sitting in a *Whole Group* and listening quietly in arranged furniture, to a teacher teaching a lesson.

Underlying factors and their influences on the use of the practices

This section answers the research question:

What underlying factors compose the teachers' personal practical knowledge about the advocated pedagogic practices and how do these influence their use in the education of under-fives?
The findings suggested that the teachers construed the practices in terms of the following underlying factors:

- **Consideration of the child** in terms of:
  
  (1) Perceptions of under-fives;
  
  (2) Home environment; and
  
  (3) School environment.

(1) Factors construed in their 'Perceptions of under-fives':

- Under-fives were perceived as, "babies, little people, free, soft and pliable, with minds that were pure and waiting to be moulded and fashioned, frail, lacking in knowledge and blank slates".

- In the learning process, they perceived under-fives as:
  
  • passing through developmental stages;
  
  • developing at different rates;
  
  • involving all their senses;
  
  • having curious and inquiring minds;
  
  • having a short attention span; and
  
  • needing freedom of movement and expression.

- The major goals they perceived for under-fives included:
  
  • developing the whole child, that is, the physical, social, emotional, and cognitive areas;
  
  • developing creativity, independence, self-confidence, and sense of responsibility; and
  
  • developing initiative, and decision-making.
• Specific goals construed included:

• Social development:
  • respecting others and their property;
  • using social conventions for politeness such as "thank you"; "please" and "excuse me";
  • co-operating and working with one another;
  • working quietly and peacefully; and
  • playing, mixing and interacting with other children.

• Emotional development:
  • developing self-confidence, good self-expression, good discipline, sense of pride in work well done.

• Cognitive development:
  • recognising shapes, letters, and colours;
  • carrying simple messages;
  • matching pictures, numbers, and letters;
  • knowing letters and numbers;
  • counting;
  • developing good diction and self-expression;
  • understanding concepts such as under and over;
  • following instructions; and
  • aesthetic development - exposure to drama, singing, music and movement.

• Physical development:
• developing hand and eye co-ordination, fine motor skills, gross motor skills, self help skills.

(2) Factors construed in the home environment include:

• Parents needing to work for economic reasons. This resulted in:
  • alternative arrangements to the home needed for under-fives;
  • under-fives neglected in the home, no story telling, no activities such as fixing puzzles, no physical activities;
  • parents' lack of time to spend with under-fives;
  • under-fives deprived of books, toys, educational materials;
  • under-fives exposed to bad habits and language;
  • lack of competent adults in the homes;
  • no interaction with or learning from children of the same age group;
  • lack of developmental experiences in some homes.

• The advantages of an early start in school, that is, beginning school at age three. These include:

  • Early socialisation to school:
  • understanding the habits and routines of school; and
  • preparation for formal school.

  • Early exposure to educational materials:
  • knowing how to manipulate materials.

  • Smooth transition to formal school meant:
  • more time to adjust to school;
• less dramatic experience at age five; and
• establishing early bonds with the teachers.

• Development of oral language construed in terms of:
  • under-fives arriving at school with lack of vocabulary, vague expressions, poor grammatical expressions, baby talk, cursing and forms of incorrect language;
  • developing their language through interaction with teachers and peers and exposure to oral language in the form of story telling, drama and discussions.

• The inadequacies of private schools included:
  • using practices not catering to the total development of the child;
  • focussing on cognitive development, that is, developing literacy and numeracy at the expense of the other areas of development; and
  • employing untrained teachers.

(3) Factors construed in the school environment included:

• Conditions for the acceptance of under-fives in school such as:
  • providing flexible programmes, allowing for option of exemptions from prayers, assembly and lunch time play with the older children;
  • providing trained teachers to teach under-fives;
  • provision of essential facilities such as secure and safe buildings, suitable toilet facilities and playing facilities; and
• elimination of disparity between schools by ensuring that all schools have the basic outdoor and indoor equipment and educational materials.

• Allowing all under-fives to spend the full day at school with provision for rest and/or free choice activities in the afternoon. The full day would be of benefit to:
  • parents who were working and may be unable to collect or take them in the middle of the day; and
  • under-fives who attended the afternoon session, and who appeared tired and less responsive after the walk or drive to school in the midday heat.

• Teachers also construed the half day sessions as beneficial because:
  • the whole day sessions were too long for these young children;
  • no formal learning activities were provided in the full day afternoon sessions;
  • more under-fives could benefit from the two half day sessions; and
  • pupil to teacher ratio during each half-day session would be smaller and more manageable than for the full-day session.

• Improving the teacher to pupil ratio to facilitate the use of practices that focus on the total development of the child:
  • these practices construed as effective with a small number of pupils to a teacher; and
• recommended a ratio of fifteen under-fives to one teacher with an aide in all schools with under-fives;

• Considering the children's positive responses to the practices used, for example, enjoyment, or compliments as they learn.

The factors construed under the theme *Classroom Experiences* included:

• Contextual problems resulting in the use of practices that were construed as focussing solely on the cognitive development of the child. These include:

  • lack of infrastructure for implementing practices construed as catering for the child's total development;
  
  • lack of space, cramped conditions, and poor physical structures;
  
  and
  
  • lack of non-teaching periods due to insufficient staff, resulting in whole group teaching of two or more classes together.

• Lack of resources in primary and infant schools, these include:

  • lack of indoor and outdoor equipment;
  
  • little or no funding; and
  
  • lack of educational materials.

• Teaching large groups:

  • large numbers meant lack of individual focus
  
  • encouraged failure in the school system;
• all schools used a format of starting the day with free choice, then Formal, Teacher Directed, Structured sessions, followed by home or rest periods in the afternoon.

• Covering the syllabus meant that:
  • practices such as Separate Subjects, Whole Group, Teacher Directed and Formal, construed as focussing on cognitive development, needed to cover the syllabus;
  • work taught recorded under various subject areas in the scheme book in order to account for work covered;
  • subjects such as Child Initiated and Informal, Free Choice and those construed as focussing on the total development of the child, neglected in order to cover the syllabus; and
  • subject matter taught in separate compartments but integrated method needed.

• Parent involvement construed in terms of:
  • Direct classroom involvement-
    • parents mistreating under-fives;
    • parents wanting to control his or her child in the presence of the teacher;
    • a parent being biased towards his or her child, thereby showing partiality;
    • children becoming aggressive and inattentive in the presence of their parents;
• children reacting shyly, timidly and not wanting to socialise or participate in the presence of their parents; and

• children showing interest and positive responses to parent’s presence.

• Parents chosen because of their interest in the child;

• Lack of parent involvement in rural districts;

• Parents being trained before entering classroom;

• Parents given a particular task or role when they are in the classroom;

• Inviting parents to share their knowledge in their particular field;

• Providing a parent education programme;

• Including parents who were willing to learn;

• Parents supporting the teachers;

• Parents’ perceptions of teaching as the teacher’s job;

• Communication between teacher and parent needed; and

• Parents needed to help the child at home.

• Teachers’ classroom experiences contributing to improving education for under-fives:

• Teachers should be consulted about issues related to the education of under-fives because:

  • They implement the practices;

  • They have insider’s knowledge of the contexts in which under-fives learn; and
• They experimented with practices within the realities of their classrooms.

(4) Factors construed as *Traditional academic focus* included:

• The effect of training on traditional practices-
  • Exposure to and the need for the inclusion of practices focussing on total development.

• Expectation of parents for traditional methods construed as:
  • Parents expecting a focus on cognitive development displayed through reading and writing;
  • Early preparation for the BSSCEE;
  • Parents expecting teaching via methods similar to those used when they were at school, for example, *Whole Group, Academic Focus, Formal, and Separate Subjects*, and
  • Private schools focussing on literacy and numeracy, for example teaching under-fives to write their names, and learn numbers, while the governments schools did not.

• Changed attitudes of parents when the expectations of the teachers were given and goals for under-fives explained.

• Expectation of teachers and administration for traditional methods before training courses in ECE:
  • They expected an emphasis on literacy and numeracy via practices focussing on cognitive development of the child;
- Their lack of awareness of what was important and necessary for under-fives;
- Their complaints about the high noise level in nursery classrooms;
- Teachers at the next level discriminating against classes taught via practices perceived as focussing on the total development of under-fives;
- Their expectations for teaching via using chalk and talking, and learning the alphabet and numbers by rote.
- Change of attitude of some teachers and administrators with the realisation that the children taught via practices that focused on their total development, tended to be more disciplined, well mannered, had good work habits and attitudes, and were able to complete task and more willing to work.
- Traditional examination method construed in terms of:
  - Taking the BSSCEE at the end of primary education;
  - Practices focussing on cognitive development, perceived as used to prepare children for this examination;
  - The change in age for writing this examination from 11 to as early as nine, which may mean a greater emphasis on more formal teaching;
  - Passes in the BSSCEE construed as a traditional way of acknowledging a teacher's success;
Schools being judged as "good" based on the number of passes in the examination;

Teachers being compelled to formalise the class to get better results in the BSSCEE;

Traditional methods alone still resulting in failure in the examination; and

Nursery teachers not yielding to pressure to teach for the examination.

Factors construed as *Teacher versus child dominance* included:

Teacher's dominance where:

- focus is on telling the child;
- there is loss of independence by the child;
- it inhibits creativity, initiative, and hinders ability to make decisions;
- children sit and listen, teacher teaches in lessons that were formal;
- the teacher is the centre of focus.

The role of the child in the classroom:

- Shared roles suggested need for some form of compromise and democracy between the teacher and child;
- The needs and interest of the child should be elicited;
- Under-fives should contribute to the selection of topics
• Lack of input by the child may affect child in the future, for example, may result in delinquent behaviour;

• Teachers gained when child has input, for example, better classroom atmosphere, and greater interest.

• Change of attitude to shared roles in terms of:
  • Teachers support child involvement;
  • Teacher dominance seen as a thing of the past; and
  • Child chooses and the teacher facilitates, guides, encourages, interacts, helps, clarifies concepts, and ensure smooth running of the classroom.

Summary of main findings

This section summarised the main findings of the study. It detailed the teachers' construing of the 17 advocated pedagogic practices as they related to the elicited constructs. The findings suggested that the teachers' constructs reflected their construing of the practices in terms of their Consideration of the child, Benefits to under-fives, Classroom experiences, Traditional Academic Focus and Teacher versus child dominance. The findings also suggested that the constructs were associated with the practices in terms of those that suggested a focus on the total development of the child and those that focused solely on the cognitive development of the child.

The general consensus among the teachers was that these factors influenced their use of the practices with under-fives in two ways. They felt that the practices construed as focussing on the total development of under-fives as
well as those focusing solely on cognitive development were used but for varying reasons. The practices that focus on the total development of the child were construed as needed in the education of under-fives. However, the teachers argued that some of the factors outlined, such as the development of under-fives, the benefits of the practices to the child, their classroom experiences that highlighted areas such as unsuitable physical facilities, lack of resources, lack of opportunities to implement, the demands of the education system; as well as the role of the tradition and the teachers and child in the classroom, were reasons why these were often replaced or supplemented by those that focused solely on cognitive development. The next section discusses these underlying factors.

Discussion of underlying factors

This section discusses the factors identified by the teachers in their construing of the practices. It provides an understanding of the teachers' construing through references to Kelly's (1955) eleven corollaries and fundamental postulate, which provided the theoretical and methodological framework for the study, and through reference to previous research in similar areas. The discussion is presented under the following headings: (a) The elicited constructs, (b) Anticipating events, (c) Variations in construing, (d) Individuality in construing, (e) Similarities in construing, (f) The relationship of the practices to under-fives, (g) Experimenting with the practices, (h) Composition of knowledge, (i) Technical cultural knowledge, (j) Theoretical knowledge and (k) Eclectic construing of the practices.
The elicited constructs

Some researchers have argued that research that focused on teachers' personal practical knowledge was limited because it was only emotional thinking expressed by the respondents (Lortie, 1975). However, other research on teachers' personal practical knowledge (Elbaz, 1983, 1991, Munby, 1982, Olson, 1981) as well as the findings from this study, revealed the many deep and varied factors, elicited and construed by teachers. In this study these were presented under the themes or categories that emerged from the teachers' elicited constructs. These themes included Consideration of under-fives, Benefits to under-fives, Classroom experiences, Traditional academic focus and Teacher versus child domination. The findings in this study reflected the view previously expressed by Elbaz (1983) from her research, in which she noted that the knowledge elicited from the teachers was “actively related to the world of practice”.

It was also clear that the elements or pedagogic practices were within the range of convenience (Kelly, 1955, p.68) of the teachers' elicited constructs. There were instances where the elements fell outside the focus of convenience, or “the area of its maximum usefulness” (Winter, 1990, p. 5). The teachers' use of zeros and silence on some issues reflected areas outside of their range of convenience. For example Joan rated the elements Child Initiated, Child Centred Informal, Free Choice, Individually, Small Groups and Whole Groups with zeros to the constructs On its own/Grouped with something else (Figure 5). Mary rated Separated Subject, Academic Focus and Abstract Material with zeros to the constructs Flexible/Too structured (Figure 3). In
addition, some teachers did not comment on practices such as Parent Involvement, explaining that they had no experience with the practice. This was explained by the Range Corollary, which stated that “A construct is convenient for the anticipation of a finite range of events only”. Kelly (1955, p. 68) further explained that there were, “few if any personal constructs which one can say are relevant to everything”.

**Anticipating events**

Kelly's (1955) fundamental postulate, which provided the theoretical framework for the study, states that "A person's processes are psychologically channelized by the ways in which he (or she) anticipates events" (p.47). In this study the findings reflected to a large extent the teachers' anticipation of impending personal and social events in ECE.

In their anticipation of a move from learning by rote to teaching the individual, the teachers trained in ECE argued that the practices advocated in their ECE training required environments where teachers were trained, the number of children per class small, and the basic facilities and materials were in place. McCartney (1984) noted similar needs. His research reported that programmes with high levels of trained teachers, large amounts of space per child, and low pupil to teacher ratios, resulted in more advanced communication skills and verbal intelligence among the children taught.

In light of their acceptance and anticipation of under-fives in schools, the findings showed that the teachers expressed concern for the length of the school day. Tayler (1992a) however contended that regardless of the length of the school day, parents, teachers and administrators must address what is the
most appropriate type of programmes and advocate strongly for improving resources.

The teachers' variations in construing of Parent Involvement and Teachers Directed suggested that they were in the process of defining and redefining their roles as teachers and parents in the classroom, a process described by Kelly (1955) as usual, as people are always in psychological motion of reforming and redefining. The findings suggested that traditionally, teachers were the sole adults in the classrooms, and they directed and controlled under-fives in these setting. Parents were traditionally excluded from the classrooms. Feiman-Nemser and Floden (1986) reported similar findings. They concluded that teachers excluded parents because they did not want family affairs interfering with students' performance in school, or to base their expectations for children on family background. They argued that some teachers saw some groups of parents as threatening either because their higher social status called the teacher's authority into question or because the teachers saw parents demands as unreasonable. Lightfoot (1978) concluded that teachers viewed most parents as "...a critical force that, if permitted to interfere, would threaten the teachers' already insecure professional status and self image" (p.37). However, the teachers in this study seemed more concerned about the threat to the children in their classroom than to their professional status and self-image. Overall however, the teachers seemed to want parents involved in, and concerned with schooling, but there was some tension in the inclusion of parents in the classroom. Feiman-Nemser and Floden (1986) argued that tension between teachers and parents exist because they
compete for the child's attention and loyalty. These researchers concluded, as was argued by some teachers in this study, that teachers see "the ideal relationship with parents as one in which the parents support teacher practices, carry out teacher requests and do not attempt to interfere with teacher plans" (p. 509).

Similar construing also occurred over the practices Teacher Directed and Child Initiated. Teachers varied on issues such as the role of the teacher as boss, facilitator or guide as opposed to the role of the child as passive listener, active participant or a shared partnership. Most teachers seemed to have construed the practices in terms of the multiple roles of the teacher. Their views seemed to reflect that shared by Gammage (1971) about the role of the teacher in the classroom. He noted that "the school teacher has to perform tasks which are not only concerned with imparting a body of knowledge, but also with the inculcation of attitudes, the development of habits and skills, the strengthening of loyalties and the reinforcement of moral codes" (p. 45-46). Given these various roles played by the teacher, Good and Brophy (1991) contended that teachers should not merely exercise control over students but students should be encouraged to assume as much independent responsibilities as they can handle. They felt that this was a way to move them toward the ultimate goal of self-management of their functioning at school. Understanding the roles of the teacher and student is vital, for as Barry and King (1993) argue, "the quantity and quality of interactions between the teacher and each of the students, whether as an individual or as a member of the class group, make up the central mechanism by which teaching and learning occurs" (p.334).
Variations in construing

The elicited constructs and their associations with the practices, as well as the factors presented under the five major themes, displayed the teachers' individuality and similarities in construing the pedagogic practices.

Individuality in construing

The individual's variations in constructions can also be understood through the Individuality Corollary which stated that "Persons differ from each other in their construction of events" (Kelly, 1955. p.55). For example, a few of the teachers linked their construing of the uses of the practices with the way they were taught at school while others said that training played an important part. Still others reasoned that the shift in educational policy from that of learning by rote to teaching the individual child as outlined in the White Paper on Educational Reform (Ministry of Education, 1995), influenced their construing. A few felt that the reactions of under-fives to the practices played a role in their choices.

Individual teachers also gave reasons for the inclusion of practices construed as focussing solely on cognitive development, namely Separate Subjects, Academic Focus, Whole Groups, Abstract, Formal and Structured in the education of under-fives. They speculated about the changed requirements for the taking of the BSSCEE, locally known as the Common Entrance Examination, and the possible impact of this exam on the use of these practices with under-fives. Some anticipated that the change from taking the examination at eleven to taking it from as early as age nine may result in pressure on them to only use these practices they construed as focussing on cognitive
development. Others noted that the change might have no impact on their way of teaching under-fives. A few felt that the change meant the need for a combination of the practices in the education of under-fives.

The teachers' construing of the practices revealed their individual constructions about the impact of significant others, such as under-fives and parents. Kelly addressed this in his *Sociality Corollary*, which stated that, "To the extent that one person construed the construction process of another, he may play a role in a social process involving the other person" (1955, p.95). The teachers' construing of the practices from the perspective of these significant others, showed constructive social interactions between themselves as teachers and these significant others. For example, the findings revealed that individual teachers construed the perspectives of under-fives by putting themselves in the place of these children and projecting how they perceived they would feel when the practices were being used. Other teachers noted the benefits of under-fives to the various practices. They highlighted their perceptions of how they felt under-fives responded to the various practices and how they developed and learn. They also noted the learning outcomes derived from the use of the practices, the level of enjoyment they perceived under-fives derived through the use of the practices and the progress made by under-fives.

Individuals shared their personal practical knowledge about their perceptions of some parents who they said would want their children to have a head start on formal education. Still others focused on the administration and teachers whom they felt would want their schools to achieve better results.
through the use of the practices construed as focussing on the cognitive
development of the child.

Winter (1990) noted that the differences might be explained by the fact
that the individuals viewed the same situations differently. The variations also
reflected the fundamental postulate of Personal Construct Psychology, which
took the stance that alternative constructions of the individuals are what really
matter. Despite the differences in the teachers’ construing, through the depth
interviews, it was possible to gain an overall understanding of how the various
practices worked in various contexts as they shared many constructs in
common. As a result, individual teachers' perspectives would allow for policy
makers to take different contexts and reasons into considerations and make
allowances or adjustments in their planning for differing circumstances.

**Similarities in constructions**

Even though in some settings the actual working conditions were
different, there was also a marked degree of similarity in various aspects of the
teachers’ construing. The similarities may be due to the similar cultural and
environmental settings in which the practices were construed. Kelly’s
*Commonality Corollary* explained similarities in construing. This corollary
asserted that “to the extent that one person employs a construction of
experience which is similar to that employed by another his psychological
processes are similar to those of the other person” (Kelly, 1955, p. 90). To
the extent that the teachers worked in a small society with a similar culture and
shared norms, values, beliefs and knowledge, one would expect some common
constructions. This section discusses the factors that were common among their constructions.

The relationship of the practices to under-fives

There was similarity in the teachers' construing of the practices in terms of the advantages of having under-fives in schools. They expressed concerns for the negative influence the home environment may have on under-fives, and the fact that most parents had to work. Research from other countries reinforces these concerns. For example Cleave and Brown (1993) noted that under-fives were in public schools because of parental demands as parents joined the work force. In addition, others argued that there was a deepening conviction among educators and policy makers that early education experiences improve subsequent schooling (Rusher, McGrevin, and Lambiotte, 1992). Still others contended that there were benefits to be gained from early intervention for children perceived to be at risk (Kagan, 1989), and their presence in schools were a response to the needs of the poor (Feeney, 1992). The teachers in this study contended that under-fives in schools were exposed to practices that developed them physically, socially, emotionally and cognitively.

Furthermore, these teachers' constructions about the child were expressed against a background in the Caribbean region, where thirty to fifty per cent of individuals who head households were women who had little option but to work in order to support their families (Davies, 1995). Davies argued that even when women were a part of a two-parent family, the rising cost of living, and economic aspirations, increasingly put pressure on both parents to work. She further argued that educated and qualified women were no longer
content to limit their occupational interest to homemaking and child rearing. The result was a trend towards out of home care and education of young children, mainly in school settings.

It was also significant that the teachers' acknowledgements of the value of the practices were not confined to consideration of compensating cultural or poverty deficiencies, but that they regarded it as a necessary stage of learning for all children, regardless of socio-economic position. The Carnegie Corporation (1994) reported that most of the research available on children in the early years related to those from disadvantage homes. However, it contended that research from countries in Europe such as Norway, Sweden, and Denmark, which have long been providers of early childhood education, described their philosophy as based on the principle that all children can benefit from the early experience of socialisation (Burke, 1995).

The findings also revealed that the teachers shared similar construing of the practices in terms of certain social norms and personal habits that they felt needed to be instilled or remedied. These included, expelling dependency on others, instilling independence, and developing decision-making abilities, creativity, initiative and responsibilities in under-fives from an early age. They contended that the practices construed as developing the whole child aided in fulfilling these needs. In addition, the majority of the teachers similarly construed the practices as socialising under-fives into life at school and encouraging them to display good classroom manners. They shared the view that society expected that as long as the child entered the formal education system it had to be taught formal reading and writing. They explained that
expected practices included those they construed as traditional, for example *Whole Group*, *Academic Focus*, *Separate Subjects*, *Formal* and *Teacher Directed*. They explained these expectations as resulting in the use of a combination of all the practices.

**Experimenting with the practices**

Kelly's depiction of each individual as a scientist, making hypotheses, testing them out, and if necessary revising them on the basis of the evidence collected, seemed to describe the way the teachers construed the practices under the five major themes. Some teachers said they were deterred from implementing the practices, and others spoke of their opportunities to experiment with the knowledge gained from training courses. From both of these perspectives the teachers were able to explain the results of their experimentation. For example, the themes, *Classroom experiences* and *Teacher versus child dominance*, revealed the experiences of teachers who gave accounts of the problems they encountered while implementing or not being able to implement some practices. Some explained that practices such as *Child Initiated*, *Child Centred*, *Informal*, *Free Choice*, *Individually*, *Integrated Approach*, *Small Groups*, *Concrete* and *Real Life Object*, did not allow for the kind of interactions between the teacher and child that was possible. They identified poor facilities, lack of space, equipment and materials, and teaching large numbers as some of the constraining factors preventing them from implementing the practices. This was confirmed by Tayler (1992b) who argued that although the informal nature of early childhood programs should,
theoretically, facilitate teacher-child interactions, teacher-child ratios and other factors do appear to militate against extended interactions.

Based on their experimenting with the various practices, some of the teachers expressed concern for the dilemmas that they said they faced in terms of covering the syllabus and catering to the development of the individual child. They inferred that the two were incompatible given the education system and its demand to have children ready to take the BSSCEE from as early as age nine. These teachers expressed fear for those who were not succeeding as they linked failure at this level to later failings in the school system, linking the failure to the pressure to teach the syllabus via Separate Subjects, Academic Focus, Whole Groups, Abstract, Formal, Structured and Teachers Directed practices. They argued they would rather focus on the child via practices such as Child Initiated, Child Centred, Informal, Free Choice, Individually, Integrated Approach, Small Groups, Concrete and Real Life Objects practices, but these did not necessarily cater for the cognitive development of the child.

Maloney (1996) agreed with the dilemma construed by the teachers. She argued that practices in which teachers planned the environment, selected materials and activities and acted as a guide and facilitator in order to meet individual needs of children, did not necessarily place the child in a learning centred setting, nor help children to achieve their potential.

It can be argued that there is a need for consensus among teachers, early childhood educators, and principals, in terms of the procedure for implementing new ideas after training courses. The teachers inferred that it was fruitless to
complete ECE programmes and then return to their classrooms where there was little scope for implementing the ideas.

The findings also suggested that teacher education programmes taught teachers about processes, which were removed from the realities of their situation, yet expecting them to believe in these ideas and implement them in their classrooms. The teachers' responses suggested they could be agents of change in the reform process since they were the ones to implement the reform. On the other hand they could also be considered obstacles to reform if they were not consulted about matters pertaining to their classrooms. Research has shown however that unless teachers were convinced that the new information was better than their old knowledge, then they will not change their views (Nespor, 1987). As noted in the literature review, the White Paper on Educational Reform (Ministry of Education, 1995) argued that too often decisions were made without consultation with stakeholders such as teachers who implement the policies and practices. As discussed in the literature review, research has shown that teachers may resent and resist efforts to change them (Prawat, 1992; Fenstermacher, 1979). McLean, (1991) contended that when consultation does not take place, teachers often reject the policy or practice or change it to meet the needs of the classroom. Researchers suggested that teachers were more willing to respond to and believe in a reform process if the measures to be implemented included input from their pool of knowledge (Barth, 1990; McLean, 1991).

The teachers' personal practical knowledge was wide and varied and consisted of individual variations of personal and emotional feelings, their
consideration of the perspectives of significant others, the social contexts, the curriculum, schools' environment and educational contexts. They also considered their experiences in terms of implementing the practices with under-fives and their training in ECE.

Composition of knowledge

Given the association of the practices with the constructs in terms of those that focused on the total development of the child or a focus on cognitive development, the findings suggested that the teachers’ shared two kinds of personal practical knowledge. The teachers' construing of the practices in terms of those that focus solely on cognitive development suggested a technical cultural knowledge based on commonly held empirically derived experiences. Their construing of those practices focussing on the total development of the child suggested construing based on principles of pedagogy and professional knowledge grounded in theoretical knowledge. These broad distinctions are discussed below.

Technical cultural knowledge

The findings suggested that the majority of the teachers in this study shared a body of technical knowledge that appear to be empirically derived from their cultural, and political environment and social contexts. Their technical cultural knowledge seemed reflected in the way the majority of the teachers in the study associated practices such as Separate Subjects, Academic Focus, Whole Groups, Abstract, Formal and Structured to a focus on the cognitive development of under-fives. They justified their views by highlighting the social and educational and political contexts and culture in which these
young children were educated. Many of the teachers spoke of the demands of the education system in terms of achieving result in the BSSCEE, and the expectations of principals, administrators, other teachers, and the parents. Others linked cultural and contextual practices such as having a large number of under-fives in each class, lack of adequate facilities and materials, lack of parent involvement and help in the classroom. They also considered their traditional, habitual use of these practices in light of the demands of the educational system.

Their construing of these various perspectives resulted in the teachers sharing a body of knowledge derived from the empirical evidence within their contexts. Presage variables such as location of the schools, types of schools and the age of the teachers seemed not to be factors that resulted in differences in construing the cultural and contextual knowledge about the pedagogic practices. For example the teachers from the nursery schools empathised with those in primary schools noting that they too experienced the conditions in primary schools. Having shared each other's social experiences the teachers were then able to construe similarly the advocated pedagogic practices.

Jipson (1991) and Spodek (1993) supported the teachers' construing of the impact and consideration of cultural and other environmental factors in the construction of their personal practical knowledge about the practices used with under-fives. Jipson argued practices such as Child Initiated, Child Centred, Informal, Free Choice, Individually, Integrated Approach, Small Groups, Concrete and Real Life Objects, described as developmentally appropriate practices (Bredekamp, 1987; Bredekamp and Rosegrant, 1992),
"often failed to acknowledge the role of culture... in the teaching-learning experiences of young children" (Jipson, 1991, p.120). She argued that much of the work on developmental appropriateness neglected consideration of cultural and community influences. She contended that the relationship between each child's personal and cultural history and the social environment of the classroom was an essential part of the curriculum. She advised that these practices could be maintained for those children for whom they were culturally appropriate but practices sensitive to the political and economic realities of culture, class, and gender, should be allowed to emerge.

Spodek (1993) in refuting Bredekamp’s (1987) view that the development of the child was the lone determining factor in deciding how young children should be taught, argued that cultural practices and norms should also be considered. Spodek explained that the development of the child must be placed within the context of the wider society and the school environment in which these children were being taught. The teachers’ construing of the pedagogic practices from a technical cultural perspective showed that the development of the child, though considered the most important factor in the classroom, was not the only factor to be considered.

**Theoretical knowledge**

The association of the practices with a focus on the total development of under-fives suggested that the teachers had much professional theoretical knowledge in common with each other. This knowledge related to their education in ECE and the various theories provided in research on child development. The theories, they explained covered the physical, cognitive,
emotional and social development of under-fives. The majority of the teachers construed the practices in terms of the development of the child, which, at this age involved rapid motor skill development, at a time when he or she was learning to use and test their bodies. The teachers also described this stage of development as a time for learning what they can do and how they can do it as individuals. They felt that some of the practices provided under-fives with the opportunity to move around and be physically involved in their education.

The teachers construed emotional development as it related to the overall development of the child. They felt that under-fives needed to learn to control and use their emotions at the appropriate times. Some of them said that this aspect of development was more important at this stage than the cognitive development. They explained that they wanted under-fives to begin to understand that others have feelings, opinions and ideas that must be respected.

They felt that the practices construed as developing the whole child were needed for emotional development.

The teachers also felt that socially, they wanted under-fives to develop ways of adapting to the society and classroom rules of behaviour. They felt it was important that they learn to co-operate and take turns. These teachers felt that ideally, and in relation to the theories of child development, the practices construed as developing the whole child were those needed for social development. Their views in terms of the total development of the child reflected those expressed by the advocates of a developmentally appropriate programme for young children (Bredekamp, 1987).
The majority of the teachers also construed the practices in terms of Piaget's stages of intellectual development (Spodek, Saracho, and Davis, 1991). Piaget described children in the 3-5 age group as in the pre-operational stage of development, maturing individually and acquiring concepts based on informal learning activities suitable to their maturational patterns (Spodek, Saracho and Davis, 1991, p.82). The teachers also reflected Piaget's view that under-fives' language ability increased in quality, range and complexity as they grew physically. They felt that the practices needed should catered for intellectual development at this stage, and provide under-fives with the opportunity for freedom of thought, and expression, as seen in Free Choice and Child Initiated activities.

Some of the teachers inferred or stated that the children at this age were at the stage when they needed to develop their initiative and learn to be independent and responsible for their actions, a view held by advocates of developmentally appropriate practices (Bredekamp, 1987, NAEYC, 1991). The teachers agreed that under-fives needed to be provided with the opportunity to initiate and undertake activities that help them develop feelings of mastery over themselves and their environment. As a result, they indicated the need for practices such as Child Initiated, Child Centred, Informal, Free Choice, Small Groups, Real Life Object. These practices were also suggested by the advocates of a developmentally appropriate programme (Bredekamp, 1987, NAEYC, 1991, Bredekamp and Rosegrant, 1992).

Some of the teachers described the need to scaffold (Bruner, 1983, Vygotsky, 1983) or provide representations and support for under-fives as they
were taught. For example, Angela from a nursery school described sitting with a child and guiding him through an activity by demonstrating and encouraging him. Others reflected Vygotsky’s (1978, 1983) views of the teacher as a helper and facilitator in the learning process, through recognition of the zone of proximal development. Their reflections on several theories suggested that they considered these perspectives important.

The teachers said they acquired this theoretical knowledge from various sources, including local and overseas training courses in ECE, observation and discussions with teachers trained in ECE, personal reading and research and viewing of videos from developed countries. To these teachers, these were legitimate sources, resulting in practices perceived as developing the whole child or focussing mainly on the cognitive development of the child.

**Eclectic construing of the practices**

The majority of the teachers concluded that there was a need for a combination of pedagogic practices. Some teachers indicated that they believed that a few practices should not dominate, but that under-fives should be exposed to a variety. They explained that there were times when *Child Initiated, Child Centred, Informal, Individually, Free Choice, Small Groups, Concrete, Real Life Object* and *Concrete* practices were needed. However, in some instances they contended, there was a need for these practices to be combined with *Separate Subjects, Academic Focus, Whole Groups, Abstract, Formal, Structured*, and *Teacher Directed* teaching. The majority of the teachers were therefore eclectic in their construing of the pedagogic practices.
For example, the teachers explained that there were times when they needed to use *Child Initiated, Integrated Approach, Child Centred, Informal, Individually, Free Choice, Small Groups, Concrete, Real Life Object and Concrete* to develop creativity, independence and initiative. They felt that these were in keeping with the way under-fives develop and learn, allowing them the freedom to move, manipulate and be actively involved in their own learning. They argued, however, that in the process of learning new concepts and understanding the routine of the classroom, practices such as *Separate Subjects, Academic Focus, Whole Groups, Abstract, Formal, Structured and Teacher Directed* were needed. They explained that these were needed in order to inculcate knowledge, as well as behaviours needed in the classroom, for example waiting one's turn, sitting and listening and raising hands before speaking.

The teachers' inability to incorporate the practices they construed as focussing on the total development of the child, into every aspect of the educational process, also suggested that though they acknowledged the need for these practices, they were still in the process of assimilating them into the classroom. They explained the difficulties experienced with practices that they construed as focussing on the total development of the child. They also construed the apparent successes and failures reaped over the years with practices traditionally used and construed as focussing on the cognitive development. The success of the practices traditionally used was reflected in international reports. For example, the Human Development Report (1994) placed Barbados in first position in adult literacy and average years of
schooling among the developing countries. Some teachers however highlighted failures, such as delinquency and dropouts in the school system, as a result of a focus solely on practices aimed at cognitive development.

The teachers' construing of practices aimed at cognitive development could also be an indication of the teachers' conformity to traditional school culture. Gaujers (1996) noted that the school's culture was largely unwritten and consisted of deeply embedded assumptions about the school and its functions. These assumptions were then accepted and professed by the personnel in the schools. Conformity to tradition seemed to be reflected in the need for the teachers to supplement the practices they construed as developing the whole child, namely Child Initiated, Child Centred, Informal, Free Choice, Integrated Approach, Small Groups, Concrete, Real Life Object and Individually with those construed as focussing on cognitive development. For example, the majority of the teachers spoke of changing their strategies during the course of the day. They described starting the day with Free Choice, Child Initiated, Informal, and Child Centred sessions where the children were allowed to make choices from various centres. This was followed by Whole Group discussions. After the morning break they described a change to Separate Subjects, Academic Focus, Whole Groups, Abstract, Formal and Structured, Teacher Directed sessions where the focus was Health, Social Studies or Science lessons. In these sessions the children were described as having to sit quietly and listen as the teachers taught them.

The perceived compromising of the practices reflected to some extent Nespor's (1987) claim that when teachers have alternative views to what they
say they believe, these beliefs will shift. Other researchers felt such conflicts were linked to tacit knowledge, which they defined as knowledge that was not in the conscious awareness but influenced thinking and acting (Corrie, 1995) and the 'know how' gained through experience (Olson, 1992). Clandinin and Connelly (1987) argued that teachers might appear to accept reform or new policies but did not link the reform to their tacit knowledge. However, when they began to talk about their personal practical knowledge then fragments of knowledge with no links were revealed. Kelly (1955) also stated in his Fragmentation Corollary that a person might successively employ a variety of construction subsystems, which are inferentially incompatible with each other.

The teachers in this study, whether they were cognisant or not of their own fragmented thinking, were in the continuous process of developing an understanding of the various practices as reflected through their construing of alternative practices for under-fives. Winter (1990) argued that Kelly’s model of man-the-scientist explained such experiences of validation or invalidation as leading to the strengthening or modification of the predictions and constructions concerned. As stated in the Experience Corollary (Kelly, 1955, p. 72), “A person’s construction system varies as he successively construes the replication of events”. So that the teachers’ construing of the need for a shift from practices that they construed as needed for a particular purpose, to those needed for other reasons, suggested that they were modifying or developing more adequate constructs and testing them with under-fives.

In line with Kelly’s Fragmentation Corollary, it seemed that in the process of developing more adequate constructs the conflict between what
practices constituted learning and what reflected play remained unresolved. The majority of teachers stated that the practices construed as developing the whole child were those related to development and socialisation. However, a few construed these practices as play and not learning. For example, in their construing of the BSSCEE and under-fives, the practices considered as focussing on cognitive development were projected as a necessity. As a result, most of the teachers noted the imperative to shift from practices that they felt helped to develop the child totally to those that aimed mainly for cognitive development.

The findings therefore suggested that the teachers construed practices they associated with the total development of under-fives as needed in the ideal world of ECE. In the reality of the context of the Barbadian society, the majority of teachers associated these practices with a focus more on play than on learning through play. In their ideal world of ECE, the teachers felt that the practices focussing solely on cognitive development were needed in the education of under-fives. In the reality of the Barbadian context these were considered necessary. These inconsistencies suggested that the teachers were still in the process of assimilating or connecting the practices thought of as developing the whole child into the reality of educating under-fives. They also suggested that the teachers were still clinging to their traditional ways of thinking about learning, while testing those they construed as developing the whole child. It can be concluded that the teachers presented an eclectic construing of the practices.
Summary

The discussion focused on the factors construed by the teachers in regard to the practices. The factors were discussed under the following headings: Elicited constructs, Anticipating events, Variations in construing, Individuality in construing, Similarities in construing, The relationship of the practices to under-fives, Experimenting with the practices, Composition of knowledge, Technical cultural knowledge, Theoretical knowledge and Eclectic construing of the practices. The factors were related to Kelly's (1955) fundamental postulate and some of his corollaries, and to views of other researchers.

The discussion also suggested that the teachers construed the practices in terms of their anticipation of future events. The constructions included a shift from rote learning to a focus on the individual, the acceptance of under-fives in schools, the inclusion of parents in the classroom, the role of the teacher and the involvement of the child in planning. The discussion also focused on the variations in the teachers' construing, suggesting that there were individuality and similarities in their thinking. The relationship of the practices to under-fives was also discussed in terms of the need to have them in schools. The flexibility to experiment with the practices was also discussed. The inadequate conditions in which under-fives were taught and the need to cover the syllabus were argued. The practices were also discussed in terms of the composition of the teachers' knowledge. It was suggested that based on the teachers construing of the practices as either focussing on the total development of the child or on cognitive development, then the teachers'
knowledge composed both technical cultural and theoretical knowledge. The section concluded with a discussion of the way the practices were eclectically construed by the teachers.

Summary to the chapter

This chapter concludes with a summary of the answer to the main research question:

- How do Barbadian teachers construe their personal practical knowledge about the advocated pedagogic practices used in the education of under-fives?

- The majority of the teachers in this study approved of under-fives in school settings. They argued that because most parents had to work the home environment was not always conducive to the children's development. They felt that a school environment with trained teachers was better than the home where in some instances these young children were exposed to inappropriate behaviour and language. They further argued that school environment exposed under-fives to practices aimed to develop them physically, mentally, socially and emotionally as they mixed with others from different home environments and learn from each other.

- The teachers construed their personal practical knowledge about the pedagogic practices in two ways, namely those focused on the total development of the child and those focused on cognitive development.

The teachers considered Child Initiated, Integrated Approach, Child
Centred, Informal, Free Choice, Teacher Directed, Parent Involvement, Individually, Small Groups, Real Life Object and Concrete as the way in which under-fives should ideally be taught. They linked these practices to total development. However, they argued that given the realities of their situations, the demands of the education systems, the large number of under-fives per class, the lack of materials and equipment and their traditional ways of socialising under-fives, implementing these practices was problematic. They argued the need for a Separate Subject, Academic Focus, Whole Groups, Abstract, Formal and Structured practices. These practices were construed as mainly developing the cognitive aspects of the child and were linked to the learning outcomes of the education system. Most teachers argued that since each group of practices served a given purpose and reason, then combinations of all the practices were needed. This resulted in an eclectic construing of the practices.

- The teachers' constructions were derived from their experiences, their personal values and beliefs; their perceptions of the views of significant others including under-fives, parents, administrators, and other teachers; the social and educational contexts in which their worked, their perceptions of the education system and its emphasis on the academic and succeeding at the BSSCEE, the development and needs of under-fives, the cultural norms and values of the society and the schools, political opinions and positions in terms of policy and practices in education, as well as their anticipation of the developments in ECE in
Barbados. They also construed areas such as the social, educational, political and physical contexts in which young children were educated, in anticipation of developments and learning in ECE.

- The teachers' personal practical knowledge consisted of two main types of knowledge: technical-cultural knowledge or a set of commonly held empirically derived principals of pedagogy; and professional knowledge rooted in the various theories on teaching presented in teachers education programmes. Technical knowledge consisted of their construing of the milieus in which they taught as well as knowledge of themselves and of significant others. Professional knowledge included knowledge of child development and learning, the curriculum and the syllabus and instructional practices. The combination of these two types of knowledge detailed the teachers' constructions of their knowledge the pedagogic practices used in the education of under-fives.

- The findings inferred that the teachers experienced difficulty and conflict in relating the practices Child Initiated, Integrated Approach, Child Centred, Informal, Free Choice, Individually, Small Groups, Real Life Object and Concrete to the realities of learning within the education system in Barbados. These practices, construed as developing the whole child were linked to methodologies devised by practitioners from developed countries and presented in local or overseas training programmes in ECE to which 19 of the 21 teachers sampled were exposed.
• The realities of the contexts in which the practices were implemented were explained by them as based in their social and educational contexts and their traditional ways and expectations of teaching. Among the realities considered were the space, facilities, materials, equipment available in the schools; the number of children in the class; the demands of the education system and achieving good result in BSSCEE or common entrance examination, as well as the expectation of the parents, under-fives, other teachers, and administration. Their constructions from these perspectives revealed a need for Separate Subject, Academic Focus, Whole Groups, Abstract, Formal, Structured and Teacher Directed practices which were seen as focussing on the cognitive development of the child.

• The images some teachers projected about the practices construed as developing the whole child, namely Child Initiated, Integrated Approach, Child Centred, Informal, Free Choice, Individually, Small Groups, Real Life Object and Concrete, were grounded in their training, research, reading, schooling and teaching experiences. These various perspectives allowed the teachers to present theoretical knowledge about the pedagogic practices.

• Some of the teachers also linked the practices construed as developing the whole child to the shift in school policy advocated in the White Paper in Educational Reform (Ministry of Education, 1995). This policy stated that education should focus on teaching individuals within whole
groups, and moving away from rote learning to focussing on activity oriented discovery learning in the classroom. Most teachers noted the incompatibility that existed between this stated policy and the facilities and conditions in place in the primary and infant schools that catered for under-fives. The lack of the appropriate infrastructure was seen as a limitation in the use of the practices construed as developing the whole child.

- The teachers' constructions in terms of linking the practices with the realities of their situations involved a process of accepting the knowledge acquired at training courses and adapting it into their realities and traditional ways of teaching. The teachers described ways of combining the ideal practices with the traditional and realistic approaches used in the established system. They also experienced conflicts in assimilating practices they considered ideal, with the realities of their situations.

This study revealed that the 21 teachers sampled, felt that the practices they construed as developing the whole child, including Child Initiated, Child Centred, Informal, Free Choice, Individually, Small Groups, Real Life Object, Teacher Directed and Parent Involvement were needed in the education of under-fives. However, the development of the child was not the only criterion used. The cultural, social, educational and personal contexts were also determining factors in the consideration of the construing of the pedagogic practices. As a result the teachers also felt that Separate Subject, Academic
Focus, Whole Groups, Abstract, Formal and Structured practices were required.

The findings in this chapter suggested that the teachers construed the practices with constructs that focused on the five major themes or categories, which included Consideration of the child, Benefits of the practices to under-fives, Classroom experiences, Traditional academic focus and Teacher versus child dominance. It also suggested that the practices were associated with the constructs in two ways, those practices that focused on the total development of the child, and those that focused solely on cognitive development. The teachers' construing of the practices in term of a focus on the total development of the child as well as the cognitive highlighted the underlying factors composing their personal practical knowledge about the practices. As a result, the teachers presented an eclectic view of the practices, sighting the need to develop the child totally as well as the need to meet the cultural demands in terms of education and social development. The finding therefore suggested that the teachers argued that combining practices resulted in meeting the needs of the education system as well as catering to the child's physical, emotional, social and cognitive development. Figure 10 gives a summary of the findings of the study.
Figure 10

An overview of the teachers’ constructions of their personal practical knowledge about the pedagogic practices.

Conclusion to the chapter

This chapter discussed the findings and answered the research questions presented at the beginning of the study, within the framework of an interpretative paradigm and Personal Construct Psychology. The teachers’ constructions of their personal practical knowledge were also discussed from research findings and reforms purposed for ECE in Barbados. The next chapter presents the implications and recommendation for ECE in Barbados.
CHAPTER TEN
Conclusion to the Study

Introduction

This chapter presents the implications and recommendations of the teachers about the pedagogic practices advocated for use with under-fives. It also highlights limitations of the study, while offering suggestions for further research in the area of teacher’s thinking in general and personal practical knowledge in particular. The chapter concludes by providing final comments about the advocated pedagogic practices.

Recommendations derived from the findings

The findings of the study give rise to a number of recommendations. These recommendations endeavour to contribute to the provision of quality education for all under-fives, the theme projected for education by the Ministry of Education. In addition, the recommendations have implications for the local training college, teachers and parents in general who could all potentially benefit in terms of their planning and understanding of life in early childhood classrooms.

Recommendations

Based on teachers' construing, they recommend that:

- Under-fives be enrolled in government schools and in the care of highly trained and committed teachers, given the importance of the early years (3-5) in terms of learning and development, and given the fact that most parents work and need to make alternative arrangement for their children.
• The Government of Barbados ensures that all government schools, in which under-fives are being educated, are designed to cater for their needs. This would honour the offer to provide quality education for all (Ministry of Education, 1995).

• Specific conditions are put in place before under-fives are admitted to schools. These include:
  • Flexible programmes with options such as exemptions from prayers or assembly, and lunch time play with the older children, and allowing separate and flexible daily schedules from the rest of the school;
  • A special area in all primary and infant schools, with separate facilities and play area;
  • Having an adequate physical infrastructure in place, including spacious and secure physical structures, proper classroom and suitable washroom facilities, indoor and outdoor equipment designed for growth and development;
  • Ensuring that all teachers placed to work with under-fives are trained specifically in ECE; and
  • Eliminating the disparity between the government nursery schools and the nursery classrooms in primary and infant schools by ensuring all schools have the same basic educational materials and equipment.

• All under-fives whether at the nursery, infant, or primary schools, be given the same hours at school.
• The majority of the teachers recommended the whole day session as beneficial to most working parents and under-fives travelling through the midday heat:

• Others suggested the half-day sessions as more suitable for the age and development of under-fives.

• The consensus was that if the full-day sessions were accepted, then policy should be put in place to allow for a part of the afternoon sessions to be used for compulsory rest period.

• The practices used (a) link the home and school, thereby supplementing the home while preparing for life at school; and (b) cater for the all round development and enjoyment of each under-five.

• The pupil to teacher ratio in all primary and infant school be reduced to allow and facilitate the implementation of practices related to developing the whole child and focussing on the individual child. The majority of teachers suggested a maximum of fifteen under-fives to one teacher with a helper or aide.

• Private schools should be registered and monitored by the Ministry of Education and requested to follow the curriculum designed specifically for under-fives.

• Parents could best contribute to the education of under-fives by helping the child at home, communicating with the teachers, and providing moral support for teachers.

• To gain insight into how parents could help at home and to improve communication between parents and teachers, the teachers recommended that:
• parent education programmes be put in place in order to provide parents with feedback and information about what was happening in the classrooms and the ways in which they can help their children. Some teachers further recommended that in these programmes, parents should be exposed to the various techniques used, the goals of the teacher and the role of the teacher and child in the classroom.

• meeting parents before the beginning of the first term at school and explaining the school policy on the education of under-fives;

• Parents working as aides should be trained first before they work in the classroom.

• Some teachers also recommended that parents with children in the same classroom should not be chosen to help in the classroom.

• Many of them suggested that they should participate in the process of choosing parents for their classrooms.

• Parents who help in the classroom should be given specified tasks and roles to prevent conflict between the teacher and parent and the parent and child.

• All staff members, principals and administrators should be exposed to training in ECE to assist with their understanding of the teachers who teach these age groups.

• No pressure should be placed on teachers to use practices that appear to focus solely on the cognitive development of the child and preparation for the BSSCCE.
• A curriculum designed specifically for under-fives should be made available to all teachers of these children whether in private or public schools. They suggested that given the size of the island, similarities in culture and the taking of the BSSCEE between 9 and eleven years, all teachers would have access to the same curriculum and its related policy.

• Teachers should be allowed to record work covered in the scheme book in the way in which it was taught, thereby relieving the pressure to focus on teaching subjects separately rather than integrating them.

• Both the teacher and child should have input in the decision making in the classroom. Teachers should take time to elicit the views and ideas about topics of interest to under-fives and incorporate these in their plans for the age group.

• A degree programme in ECE should be offered at the local university level to those teachers desiring to pursue such a course.

• Since training was a major influence in their views about the practices, adequate training, reflecting and considering the cultural and the overall aims of education in the Barbadian society should be incorporated in their education. Most teachers suggested that techniques based on overseas classrooms should be adapted to reflect the local culture. They also recommended that teachers being trained in ECE be exposed to more practical teaching in their training, allowing them to observe as well as experience, since these leave a more lasting impression and understanding in the teachers’ thinking, than the theory.

• Given their experiences they should be given opportunities to talk about what they do in their early childhood classrooms. Talking about what they do,
why they do what they do, elicits valuable insiders’ views of classroom life and provides teachers with the opportunity to redress fragmentation in thinking.

- Since teachers are major agents of change in the classroom and responsible for implementing the practices taught to them in their training, they should be given opportunities to implement practices to which they were exposed. This should be followed by the use of various techniques to tease out and evaluate their views for consideration and possible inclusion in the development of policy and practice in the education of under-fives.

Limitations of the study

This study was limited in terms of the time and finance available to the researcher. The six months spent in collecting data revealed valuable information about the practices, but longer engagement in the field and a wider sample may have possibly added other perspectives to the findings. The time period and sample however could not be extended due to the cost factor and the time constraints for the period of study.

The findings of the study were a result of repertory grid interviews and in-depth interviews held with 21 teachers in government primary, infants and nursery schools. Their voices are limited, comprising a growing but still small percentage of the early childhood settings catering to under-fives on the island. Private schools make up the majority of early childhood education provided for the 3-5 year olds.

The study is therefore context bound in terms of time, locations, schools and teachers. The findings of the study are an interpretation of the data gathered and no attempt has been made to suggest they hold any generalisations. This is in keeping with qualitative research in which particular audiences interpret the findings of the
study and determine the applicability (Lincoln and Guba, 1994). The richness of the data presented allows the reader to decide whether the findings are applicable to his or her situation.

The study was based on the perceptions or personal practical knowledge of teachers who work in early childhood classrooms in Barbados. They gave their views freely and the researcher accepted what they said as a true reflection of their thoughts, feelings, beliefs and knowledge. The research provided the teachers the chance to review and make changes to the data collected on the repertory grids, principal components maps and depth interview transcripts. This process allowed for clarification of information presented and enhanced reliability and validity.

The repertory grid technique was time consuming. However, it was a very worthwhile procedure as it tapped into deeper cognitive awareness levels than would be available through usual interview techniques. Repertory grids allowed for the organising of the practices through the constructs, and the further eliciting of information during the depth interviews based on personal constructs.

It must be noted that the 17 pedagogic practices or elements were not all encompassing in the education of under-fives and consequently discussion is limited to the domain of these constructs. There is no easy solution to the selecting of guiding elements, for as Feiman-Nemser and Floden (1986) noted, concepts from academic disciplines may not capture the way teachers themselves think about their work, and teachers were seldom able to provide constructs that cover a variety of situations. In this study, all efforts were made to elicit suggestions and confirmation from the teachers concerning the choices of practices in the study.
The findings in the study are bounded by the context and time as teachers may change their views during the completion of the study. The details of the data collection procedure and a description of the sample allow for further research and revision of the findings.

**Recommendations for further research**

This study revealed the personal practical knowledge of 21 early childhood teachers in Barbados. Its truthfulness and credibility were based on what they said about under-fives and the pedagogic practices. There is therefore scope for a follow-up study and a revisiting of the teachers involved to review the views presented in this study, and justify and or compare any changes that may have taken place.

There is also scope for long term systematic collection of information about what these teachers do in the classroom. Kelly (1955) himself acknowledged behaviour as an expression of a person’s construct system and suggested that behaviour embodied the experiment. Linking what teachers think and what they do, through research, may highlight some of the strategies they employed in their teaching that they may not be aware they employ. This may in turn lead to a reviewing of the practices, and further experimenting with alternative strategies thereby helping the teachers to increase or improve their techniques. Because constructs and tacit knowledge were not always articulated in words, it is suggested that looking at what teachers do along with what they say about what they do, will enrich the understanding of their construing.
Many views exist from various perspectives on what ECE should be like for under-fives. There is also scope for tapping the personal practical knowledge of significant others involved in the education of under-fives. For example, the parents, administration, other teachers and under-fives could be interviewed to ascertain their personal practical knowledge about ECE. The repertory grid technique would be useful as an organisational tool and for eliciting information from the respondents. It is especially good at eliciting the views of young children, through pictorial representation of what is being construed. It can also be used to provide a comparison of the views held by these significant others. Linking these various perspectives can provide valuable information on what ECE can be like for under-fives.

This study focused on the personal practical knowledge of teachers from government primary, nursery and infant schools. There are many private institutions that offer ECE to many of under-fives in Barbados. A study focussing on the education offered in private schools to under-fives can provide further insight into the education offered, and measures needed for improvement. Continual research with teachers in similar schools is needed in order to encourage and help them to express and further clarify their thinking, while updating and reviewing the findings of this study.

Conclusion to the study

This study provided the teachers with the opportunity to talk about the pedagogic practices used in the education of their students. The repertory grid technique was a very efficient method for organising and eliciting the personal views of the teachers, allowing access to their high and low levels of cognitive
awareness, which would have been difficult to obtain from other interviewing techniques. The in-depth interviews allowed the teachers the opportunities to further clarify, expand and explain their personal practical knowledge about the pedagogic practices used with under-fives. These interviews also increased truth, credibility, reliability and validity of the findings. The process of elicitation provided the insider’s view of the use of the practices with under-fives and rich information about life in early childhood classroom in Barbados.

Buchmann (1983) argued that it was critical that teachers’ knowledge be justified on the basis of public criteria, including colleagues, the curriculum and equity, rather than just private ones, for example, personal preference. The teachers in this study did justify their construing of the practices in areas besides their personal preferences, and as suggested by Buchmann (1983), the findings presented are now open to further research, new evidence and subsequent revision.

The findings presented in this study implied that they could be of great value to planners and educators in ECE in Barbados and beyond. Kelly (1955) argued that effective communication and interaction among people meant that they each had to have some knowledge and understanding of another person’s viewpoint. The Ministry of Education called for the viewpoints of the stakeholders in education. The Ministry recognised the importance of making policy decisions based on the insiders’ views and the best available information. Consequently, it is hoped that these alternative constructions of knowledge about the pedagogic practices used in the education of under-fives will aid and
improved communication and democracy in the planning and development of early childhood education in Barbados.
REFERENCES


years: Policy, research and practice. West Perth, Western Australia: Meerilinga Young Children’s Foundation.


<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Correspondence between the Researcher and the Ministry of Education</td>
<td>430</td>
</tr>
<tr>
<td></td>
<td>Letter A: A request by the researcher to conduct research in schools in Barbados</td>
<td>430</td>
</tr>
<tr>
<td></td>
<td>Letter B: Permission for the researcher to conduct the research in schools in Barbados</td>
<td>432</td>
</tr>
<tr>
<td></td>
<td>Letter C: Copy of the letter sent to schools requiring their assistance in the study</td>
<td>433</td>
</tr>
<tr>
<td></td>
<td>Letter D: Letter to the Ministry of Education explaining changes to the data collection process</td>
<td>434</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Letter to Colleagues, Repertory Grid Sheet, Survey Form</td>
<td>435</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Disclosure and Informed Consent Form</td>
<td>438</td>
</tr>
<tr>
<td>Appendix D</td>
<td>Non-schedule Standardized Interview Questions</td>
<td>440</td>
</tr>
<tr>
<td>Appendix E</td>
<td>Copy of a completed Repertory Grid Sheet, Copy of a completed Survey Form</td>
<td>441</td>
</tr>
<tr>
<td>Appendix F</td>
<td>Copy of a Transcribed Interview</td>
<td>444</td>
</tr>
<tr>
<td>Appendix G</td>
<td>The Elicited Constructs organised under five major Categories or themes by the researcher</td>
<td>457</td>
</tr>
<tr>
<td>Appendix H</td>
<td>Analysis of the Repertory Grids and Principal Component Maps</td>
<td>466</td>
</tr>
</tbody>
</table>
Appendix A
Letter A: A request by the researcher to conduct research in schools in Barbados

The Chief Education Officer
The Ministry of Education
Jemmotts Lane
St. Michael
Barbados
West Indies

Dear Sir,

I am presently on training leave and enrolled in the PhD programme at the Edith Cowan University in Perth, Western Australia. I am about to commence the process of data collection for my research in Early Childhood Education.

I am hoping to return to Barbados for the first and second terms of the 1995-1996 school year (September to April). This visit is for the collection of data on my research entitled "Teachers’ Beliefs Regarding Appropriate Practices in Early Childhood Classrooms: The Barbadian Perspective."

This study involves surveying early childhood teachers to elicit their views on what they are doing in their early childhood classroom and discussions with a few teachers about their beliefs and classroom actions.

The proposed fieldwork involves:
1. a survey of all early childhood teachers in Barbados;
2. structured interviews with 10% of those who respond and are interested in continuing with the research;
3. Case studies of four early childhood teachers chosen from those involved in the structured interviews. The case studies involve observation, depth interviews and conversations with the teachers.
This is an opportunity to study the needs of children in early childhood classrooms from the point of view of the teachers who implement the programmes. This local and hence cultural perspective will aid in the improvement of our education of the very young.

As part of the university requirements a letter is needed from your office granting the necessary permission to collect information from the teachers and to visit their classrooms. I am therefore requesting permission to visit these classrooms and become a participant observer in the everyday activities of its members.

This is an urgent request. Already I have missed the month of September that was crucial in the data collection process and I am now hoping to be in Barbados by the 1 October 1995. I have enclosed the survey and a part of my research proposal that outlines the procedure for the collection of information while I am in Barbados. I will deliver to your office a copy of the full proposal on my arrival in Barbados.

In order to post the surveys to the schools, I need a list of the names and addresses of the primary schools with early childhood classrooms (children older than three but less than five). Please do not allow the lack of this list to delay your reply.

You reply is needed as soon as possible so that final approval can be granted by the university and final preparations for the trip finalized. I am willing to supply any other information on the proposed study. Thank you for your assistance in this matter.

Yours faithfully

..................................................
Sandra Anderson (Mrs.)

cc Mrs. Cecile Leach, Training Liaison Officer, AusAid
Ministry of Education, Youth Affairs & Culture
Jemmott's Lane,
St. Michael,
Barbados, W.I.

1995-09-15

Dear Madam,

I am directed to refer to your letter dated September 4, 1995 and to inform you that you have been granted permission to conduct research on "Teachers' Beliefs Regarding Appropriate Practices in Early Childhood Classrooms: The Barbadian Perspective."

This Ministry would appreciate receiving a copy of your findings.

Best wishes for success in your studies.

Yours faithfully,

C. St.Hill (Mrs.)
for Permanent Secretary.

CSH:ar
CIRCULAR

NO.P.30/1995
REF. NO. CH/T3

FROM: PERMANENT SECRETARY, MINISTRY OF EDUCATION
YOUTH AFFAIRS AND CULTURE

TO: Principals of Primary and Nursery Schools

DATE: 1995-10-19

Research on Early Childhood Education In Barbados

I am directed to inform you that Mrs. Sarah Anderson has been granted permission to conduct research in Barbadian schools on: "Teachers' Beliefs regarding appropriate Practices in Early Childhood Classrooms: The Barbadian Perspective". Mrs. Anderson is a Ph.D student at Edith Cowan University in Western Australia and is expected to be in Barbados during Term I & II, 1995-96.

2. The proposed research involves a survey of early childhood teachers, interviews with 10% of those who respond, and case studies of four of the interviewees.

2. It would be appreciated if you would give Mrs. Anderson your assistance.

C. St. Hill (Mrs.)
For Permanent Secretary.

CStH: jc
The Permanent Secretary
Ministry of Education
Jemmott's Lane
St. Michael
Barbados

Dear Sir\Madam,

With reference to your letter dated 15th December 1995, ref. no CH/T3 in which you granted me permission to conduct research on "Teachers' Beliefs Regarding Appropriate Practices in Early Childhood Classrooms: The Barbadian Perspective" I wish to inform you of a few minor changes.

First, the title has been readjusted and now is "Barbadian Teachers' Constructions Of Their Beliefs Regarding Teaching Practices Used In Early Childhood Education."

Secondly, the methods of data collection have been reduced from that previously proposed. They now include the Repertory Grid technique and interviews with early childhood teachers. For further details please see pages 20-23 of the enclosed research proposal.

Thirdly, due to circumstances beyond my control the time period for data collection has been readjusted. The projection is now for the exercise to last from January to June 1996. I am presently in Barbados and hope to commence the data collection phase of the study in the first week of January 1996.

I want to apologize for any inconvenience caused due to the delay in the start of the data collection process and wish to thank you for your kind permission and cooperation in the development of this research project.

Yours faithfully,

Sandra Anderson (Mrs).
Appendix B
Letter to colleagues explaining the research

Dear Colleague
I am a Barbadian teacher engaged in a research project at the Edith Cowan University in Perth, Western Australia. As part of my research and with the permission of the Ministry of Education, I am conducting research on teachers' personal practical knowledge about the under-fives and the practices used in early childhood education. This letter is to invite your participation in the research.

The first interviews start with a repertory grid. The purpose of this grid is to find out some of your views about practices used in relation to the under-fives in early childhood classrooms. Your participation is voluntary. You are not required to write your name. Your answers will be held in strictest confidence. This is not a test. There are no right and wrong answers. You are asked to give your honest opinion about the terms as they pertain to early childhood education, and to supply background information about yourself by ticking a box, or giving an answer in the space provided. Please be certain to respond to every question.

To inform you about the results of the grid and to further elicit your views about teaching practices in early childhood education, follow up interviews will be held with some of you after the grid is completed.

Should you have any questions about this research, please call me at - (B'dos) I will be happy to share the findings with you after the study has been completed.

Yours sincerely
### Repertory Grid Sheet

<table>
<thead>
<tr>
<th>Structured</th>
<th>formal</th>
<th>Concrete</th>
<th>real life objects</th>
<th>abstract material</th>
<th>whole groups</th>
<th>Small groups</th>
<th>Individually</th>
<th>parent involvement</th>
<th>free choice</th>
<th>Informal</th>
<th>child centred</th>
<th>academic focus</th>
<th>separate subject</th>
<th>integrated approach</th>
<th>Teacher directed</th>
<th>child initiated</th>
</tr>
</thead>
</table>

1
Survey Form

Please tell me a little about yourself. Tick the appropriate answer or fill in the spaces

Your Class:

Age range of children in your class.....

No. of children in your class.....

No. of nursery classes (older than three but under five) at your school....

Your Sex:

Male ................... . Female...................

Age Group:


Your level of training:

Teacher's college............

University....................

Qualification............................

Special training in early childhood education:

Please specify..................................................................................................

Length of the course....................................................................................... 

Country............................................................................................................ 

Qualification.....................................................................................................

Your teaching experience:

Under five years............. 5-10 .......... 10-20 ............. 20+ ...... 

The location of your school:

Rural............. Urban.......... sub-urban...... City....................
Appendix C

Disclosure and Informed Consent Form

DISCLOSURE AND INFORMED CONSENT
To All Teachers Involved In The Study

The purpose of this investigation is to explore, analyse and interpret teachers' beliefs regarding teaching practices used in early childhood classroom in Barbados. The study aims to elicit the content and structures of beliefs on certain areas in teaching, as well as elicit views on the inclusion of these beliefs in the development of policy and practice in early childhood education in Barbados.

Twenty teachers have been randomly selected from the population of early childhood teachers for inclusion in the study. These teachers' beliefs will be identifying through structured interviews using a repertory grid technique. The grid technique involves identifying teachers' beliefs about the similarities and differences between teaching practices used in early childhood classrooms and rating the relationships on a scale of 1-5. Demographic data will be collected from each teacher via a short structured survey sheet. Depth interviews and conversations will be used to investigate the findings of the grids and the content and structure of teachers' stated beliefs; the constraint and opportunities that influence practices in relation to the stated beliefs; and the expectations of parents, pupils and administrators as perceived by the teachers. Policy statements collected from the Ministry of Education will be used for comparison with teachers' stated beliefs to identify the similarities and differences.

This project will begin in January 1996 and end in July, 1997. The grid requires about an hour of the teachers' time in the initial stage. The follow up sessions will be on average one hour long, and each teacher will have two interviews which will be audio-taped with your permission. These will be done at times and places convenient to the you, the teacher.

This study will be of benefit to the early childhood field in Barbados as it documents your views as the teachers of the under-fives. It gives an explanation of what you think of teaching practices in early childhood education, given the context, conditions and expectations of the society in which we live and work. It provides the opportunity for you to reflect on your work with the under-fives and analyse whether your expectations are being achieved, and if not why not. It allows you to express your opinion on the inclusion of your beliefs in the policy and decision making in any further development in early childhood education in Barbados. Your beliefs will be documented and forwarded to the relevant authorities and can influence decisions concerning development of education for the underfives.

Participants have the freedom to withdraw at anytime. Confidentiality is assured by respecting your rights to privacy. The names of teachers or schools will not be identified in the study. All information collected will be strictly confidential and kept in files available only to the researcher. All information recorded in the interviews will be transcribed and returned to the individual teacher for clarification and confirmation.
Any questions concerning the project entitled “Barbadian Teachers' Constructions of Their Beliefs Regarding Teaching Practices Used In Early Childhood Education” can be directed to Sandra Anderson (Principal Investigator) of Edith Cowan University, Education (Department) on (09) ________________.

I have read the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in this activity, realising I may withdraw at any time.

I agree that the research data gathered for this study may be published provided I am not identifiable.

Participant or authorised representative ___________________________ Date ________________

Investigation ___________________________ Date ________________
Appendix D

Non-schedule Standardized Interview Questions

An outline of the questions to be covered in the depth interviews.

Q. What are your views about the practices and the way that they are grouped on your principal component map?
Q: How do these practices work for you in a day's program?
Q: What factors encourage you to use your techniques?
Q: Any other factors discourage you besides the ones you mentioned before?
Q: Where did your ideas come from?
Q: What is good teaching for this age group?
Q: Are you in anyway influenced by parents?
Q: In what forum do you tell them or your plan of work?
Q: What about Ministry's policy?
Q: Why do you say it is debatable?
Q: But in terms of implementing your teaching methods do you get full support from visiting officers?
Q: What about administration?
Q: Were there any teacher education programs?
Q: What do you think of three or four year olds in school?
Q: What could be your goals for these children?
Q: Do you think all teachers teaching this age group should be trained?
Q: How do you think these young children should be evaluated?
Q: What about discipline and the use of the practices?
Q: Flexible transfers as they relate to the common entrance examination- do you think that it will impact on your use of the practices in the future?
Q: What about parents as aids?
Q: What about teacher empowerment do you think it has a part in the development of policy and practice in early childhood education in Barbados?
Q: What pupil to teacher ratio would you recommend?
Q: How do you determine what is correct in teaching these young children?
Q: How you feel about using these practices and teaching this age group?
Appendix E

Copy of a completed repertory grid

<table>
<thead>
<tr>
<th>informal program</th>
<th>structured</th>
<th>formal</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECD involves</td>
<td>1 3 1 2 3 1 1 1 1 1 4 2 4 5 3 2 5 2</td>
<td>reflects formal learning</td>
</tr>
<tr>
<td>a lot of use of</td>
<td>1 3 1 5 3 1 1 1 1 1 2 4 1 1 3 3</td>
<td>does not focus on</td>
</tr>
<tr>
<td>emphasis is on</td>
<td>1 5 1 5 3 1 1 1 1 1 2 4 1 4 4 1 4 3</td>
<td>lack of emphasis</td>
</tr>
<tr>
<td>flexibility</td>
<td>1 3 1 4 3 1 1 1 3 2 2 3 4 2 2 3 3</td>
<td>no flexibility</td>
</tr>
<tr>
<td>isolation</td>
<td>5 4 6 1 2 5 5 3 4 3 3 2 5 5 4 2</td>
<td>integration</td>
</tr>
<tr>
<td>benefits children</td>
<td>1 2 1 4 3 1 1 1 1 1 4 3 1 1 3 3</td>
<td>does not benefit</td>
</tr>
<tr>
<td>children not involved</td>
<td>1 5 1 3 3 1 1 1 1 3 5 4 1 4 4</td>
<td>less child involvement</td>
</tr>
<tr>
<td>appeals to children</td>
<td>1 4 1 4 1 1 1 1 3 3 5 1 1 3 3</td>
<td>unappealing</td>
</tr>
<tr>
<td>child uses senses</td>
<td>1 3 3 4 1 1 1 0 1 3 5 1 1 3 3</td>
<td>lack of use of senses</td>
</tr>
<tr>
<td>learning tied together</td>
<td>1 3 1 4 3 1 2 2 1 1 2 3 4 3 3 3</td>
<td>segregated learning</td>
</tr>
<tr>
<td>helps child to make choices</td>
<td>1 4 3 3 1 1 1 2 1 3 3 5 1 1 3 3</td>
<td>inability to make choices</td>
</tr>
<tr>
<td>develops initiative</td>
<td>1 4 3 3 1 2 1 3 1 2 3 4 2 2 3 3</td>
<td>lack of initiative</td>
</tr>
<tr>
<td>builds character</td>
<td>1 3 2 3 3 1 1 3 2 4 2 3 3 3 3 3 3</td>
<td></td>
</tr>
<tr>
<td>teacher-directed</td>
<td>child-initiated</td>
<td>integrated approach</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

- Children benefit
- Child too young
- Need more
- Mature
- Need less
Copy of a completed Survey Form

Please tell me a little about yourself. Tick the appropriate answer or fill in the spaces.

Your Class:
Age range of children in your class: 3-5
No. of children in your class: 16
No. of nursery classes (older than three but under five) at your school: 2

Your Sex:
Male □ Female ✓

Age Group:
Under twenty □ 20-29 □ 30-39 ✓ 40-49 □
50 plus □

Your level of training:
Teacher's college: Yes ✓ No □
University: Yes ✓ No □
Qualification: Teacher's Certificate / A.C.P. / L.C.P.

Special training in early childhood education:
Please specify: Early Childhood 2 yr. training course.
Length of the course: 2 yrs.
Country: Barbados
Qualifications: Specialist Certificate in Early Childhood Education

Your teaching experience:
Under five years □ 5-10 □ 10-20 ✓ 20+ □

The location of your school:
Rural ✓ Urban □ sub-urban □ City □
Appendix F

Copy of a transcribed interview

Q. What are your views about the practices and the way that they are grouped on your principal component map?

When I think about the integrated approach to teaching I think in terms of a correlation between the subject area which are presented in the syllabus. I think in terms of correlating these subjects so that there is a bond between them. So that instead of each subject being presented separately, the children can see the connection between all of them. I think this is important since our brain does not process information in separate compartments. We think of things as a whole. We relate things to each other and as a result of this I think that it is important that the integrated approach be used with young children. I think it also helps them to remember information, which they are taught, since they are able to see the connection between the material, which is presented. A link is also formed, they can form a line from one lesson to another, and from one day's activity to another. In this approach I believe that they should be small groupings, since it helps the teacher to be able to work with each child in a closer fashion. When there is a larger group, there is difficulty in getting around to each child in observing the strengths and weakness of each child. But in terms of the use of small groups, you are able to analyze each child's strengths and each child's weaknesses and provide necessary follow up activities and necessary guidance to help each child as an individual. And this is important since each child is an individual learning through different means. And attention therefore should be paid to the learning style of each child. And each child has individual needs as well and these should be attended to on an individual basis, rather than on a class basis.

I believe that the information presented should be child centered, in that the teacher should not be the sole person to decide what should be presented or how it should be presented. But I believe the children should have some say in, for example what topic they might prefer to study as a unit. They can be guided in selection of a particular topic per term, they can be guided as to the activities they will select on a particular day, but they will not be forced or the material is not pushed at them so that they do not have a choice. And this is where free choice comes in. Although there will be a selection of activities, the children should have a choice of selecting the particular activity which they prefer to work with at any time. This will help the children to learn to make choices in life and to make wise choices. They will learn to make decisions for themselves and if they select a particular task, the interest is there and it means they will work on the task until it is completed.

Real life objects should be provided since it is more practical. Children at this age can not learn from abstract material, because their brains have not reached that stage yet. And therefore they need to have real life material to help them to grasp the concepts, which are being taught.
I believe that there is a place for informal learning with these young children. They tend to be more relaxed, they share their views freer, and there is greater participation when there is informal teaching. Also when concrete material is provided like real life objects, it helps the children to grasp the concepts that are being taught. Also at that tender age the concrete materials make a greater impression on their mind, a lasting impression. They can manipulate these materials; they can see exactly what you are trying to teach them rather than trying to process it in their brains in an abstract manner. They can handle and they learn by touching, they love to touch materials and they are able to use them, pound them, push them together, pull them apart, and it helps them to understand the concepts that are being taught.

Parent involvement is very important as far as the teaching of these children is concerned. Parents help as it were to hold up the hand of the teacher. What the children learn at school, if the parents are involved they will help to implement it at home. They will give strength to what is being taught by the teacher. Also you will find that the parents will be of greater support to what ever the teacher is doing in the classroom. For example, if a tour is planned say for any particular unit, and you have the parent involvement, they will support your plans and you can even count on them for providing materials that might be needed. Also even their time, they might be willing to accompany you on the tour if necessary. And I believe that parents should have great involvement in whatever is being done in the classroom. They should be notified by the teacher about the particular unit being taught about the material the children may need to collect. They should be informed about what the children are going to be doing with the material, and when they are sent home to collect the materials or to find information, the parents will be well aware of what is going on and they will be able to lend a hand.

In terms of the teacher being in charge totally as far as the teaching of children, I believe that this has great limitations. The teacher should play a part in providing information but should not be the sole provider of information. I think that it will stump the creativity and the initiative of the children. I believe that the children should have a role and the teacher should have a role. But the teacher should not be in total control of everything that is said and done in the classroom. I believe that children should learn to use their initiative, if they are directed in every way, then they will not learn to use their initiative, if they are directed in every way, then they will not learn to use their initiative. They will grow up depending on others to make decisions for them, to tell them what to do in every situation, and this will not benefit them in their life in general. I believe that there is a place for formal instruction within the early childhood classroom. But all instruction should not be formal. There should be time for informal instruction as well as for formal instruction.

Abstract materials, I believe should be avoided as much as possible at this early stage because of the stage at which the children are at mentally, and at their maturation level. I believe that at this early age that they can not deal with abstract information. The focus should not only be on the academics, these children have to develop physically,
emotionally, socially, aesthetically. And I believe that although the academics should have a place, the focus should not only be on the academic but on the development of the total child.

As far as whole groups are concerned, there are limitations in that when you teach as a whole group, there are children who do not benefit. The brighter ones they will benefit, the slower ones will not benefit at all, and the average ones they will just be tagging along more or less. So the whole group, I believe should be avoided. When whole groups are used, I believe a lot of information is lost to the children and to the teacher. The teacher is not aware of how the children are benefiting if they are benefiting. The weaknesses and strengths will be more difficult to be diagnosed, if they are diagnosed at all. And therefore small groups and individual instructions would be of greater benefit.

When subjects are taught separately, it means that children then have to deal with each subject matter in a separate compartment and like I said before our brains are not made up that way we learn things as a whole. And therefore I believe that we should avoid as much as possible teaching subjects in isolation. Such as teaching Mathematics, in one lesson and it is totally different from the Language Arts lesson which follows or the Environmental Studies, which follows later. I believe that there should be a link between these subjects. For example, one can use Comprehension in Mathematics; one can use Mathematics in Language Arts, Art in Environmental Studies, Music in all subject areas. And I believe that if this linkage is made and the correlation... there is this correlation between the subjects, the children will benefit more. They will be more meaningful to them, and it will be easier to continue lessons, to follow on lessons from day to day, rather than have to go back and say, do you remember when I did such and such. And then the children would have forgotten because of some other thing that they had no connection at all to what you are trying to get them to remember. So I believe that separate subjects should be avoided as much as possible, and instead that there should be a total correlation between all the subjects.

Q: How do these practices work for you in a day's program?

A: In a day's program, I would begin by having a free choice session. In this session, a particular learning center will be identified for use for that particular lesson. There would be a number of learning activities available in that particular center, and these activities would be targeted from simple to complex, to cater to the individual needs of the children. The children will be allowed to select their activities, but you have to work along with them, and give them guidance and encouragement.

So they have the free choice and they are encouraged to complete the task. They are not allowed to return the activity until it has been completed and seen by the teacher. After that there is evaluation in terms of discussing with the children what they have done. If something could have been done a different way or a better way, what they have gained
from what they have done or so on. And then the activity can then be returned. If they complete the activity before the end of the session, then they are allowed to use another activity. But the emphasis is on getting the task completed. After the free choice activities, there is usually then formal instruction, which may be in the form of a picture discussion. The picture would have been selected by the teacher based on the unit, which is being presented during the term. So there may be picture discussion, there may be object discussion, from that then you may have Language Arts coming out which may be in the form of a sentence for the children to read. You will have your art where they may have to illustrate. You have your singing, a song or so based on a particular lesson, which would have been done. Sometimes physical education, a game, coming out, for example if the picture was about cricket then you use the opportunity to allow the children to play a short game of cricket so that they can see the practical thing, it is not just a picture, that it is real life. If you have discussed a picture about a worker, you can have dramatization, where the children can imitate the worker and his or her work, things of that sort. That is the formal part. But in there as well, you can also have informal discussions coming out. And at times again you have free choice in that you may ask the children to choose to do this or that at the end of the lesson. You can choose whether you want to go and dramatize the particular scene or whether you want to illustrate it. So there is also free choice that would come out there. And there would also be the use of concrete materials during the lesson. For example, I mentioned a game of cricket, you need your bat, your ball what ever, so that you have your concrete materials. It is not just like the children have to imagine what it would be like, but you have your objects there ready to be used. At the end of the session you may ask the children to go home and ask their parents may be to tell them the names of three West Indian Cricketers or the names of three cricketers from the opposing team or whatever, so we have parent involvement coming out.

There is not adequate space for the use of such large puzzles. So at times you have to shift around, move around furniture, then you have the problem then of getting them back together. So sometimes you find you may waste time which could be avoided if there was space.

And there is also the problem of having about thirty children that also diminishes the amount of space that you may have. Because you have thirty children in a room, whether it be one class or two you have about thirty odd children, and that takes up a lot of space. And if you need to have you centers out as well established in the room, you hardly ever have any space left to do anything, even dramatization, you have to go outdoors. It is not always possible to go outdoors. so you have a number of shortcomings, in any one day. You may, if you are teaching in a classroom where there is another teacher, if that teacher is absent, you are required on most occasions to teach the two classes. It is difficult to monitor the progress of each child in that classroom in terms of the use of activities in any given session so you may have to rotate the activity session where you may have activities for one group in the morning, activities for another in the afternoon, and still you will have to pay attention to the other group with whatever activities that you have given them. So
at times it can be difficult, but you have to do the best that you can under the circumstances.

Q: What factors encourage you to use your techniques?

A: I have realized that the children really enjoy the early childhood method. They are really into it, they benefit a lot from it, they look forward to their lessons, the participation is great, and especially when I realize that from day to day they can say to me, "teacher, we did something like that yesterday," or "teacher you know that we talked about something like that and you know teacher if we do this it would come out like that that we did yesterday, that really encourages me. The children really benefit. And although the formal instruction is not pushed at them, when it comes to the time when they are to, more or less focus on formal instruction, they are well able to handle it. And it gives me joy and therefore the desire to continue because I can see the benefits to the children's learning.

Q: Any other factors discourage you besides the ones you mentioned before?

A: Those are the main ones. But at times you find that you may not get the support from maybe other members of staff. At times it may be a administrative staff, more or less, you know, sometimes you get the impressions that they want it done but they do not want it done. So you know at times you can be discouraged. Nobody will ever tell you, but say for example, you may need some materials, you may know that funds are there, you may ask for fund to buy materials but you will be told that no funds are available. That is subtly to me, trying to get you not to do it, if you do not have the funds you do not have the materials then you can not work the program. So one of the deterents that can be great is that you have to pull your pocket if you want to push the program, you have to pull your pocket and buying the materials for yourself. And if you, for one reason or another if you are unable to do that and funding is not available from the school, that is a great deterrent, it can be a great problem.

Q: Where did your ideas come from?

A: Well, I remember a couple years ago observing how the four to fives were being taught and how the five to sixes were being taught. And I recognized that they were being taught in the same fashion more or less. And by having children of my own I recognized the methods were too advance. And I started to really think about it seriously. Then I started to do some reading on the methods for teaching young children. Then I visited a school, a nursery school. I asked the headteacher for permission, in fact she went along with me and we observed what was being done. And on returning to the school then, I tried my best to implement it as far as I could. But of course there was no material, there was no dress up corner, there was nothing. And I tried my best to start something going in some small way.
Then I went on an early childhood workshop - a six weeks workshop, which was presented by the Ministry of Education, I gained a lot of information there. I started making teaching materials, hand made materials at that time, and tried to implement a few more ideas. And then I applied for an early childhood program, which was being offered by Erdiston College, that was a two year program. Initially it was supposed to be a year, full time. Then it turned out to be eighteen months one day release, then it ended up to be two years, one day release.

But during that time you had to do a lot of reading, had teaching practice sessions and that helped me a lot. I got a lot more insight into actual teaching and when I realize how the children were benefiting, it encouraged me to study more, to really put everything as far as possible into practice. So I really started going for it all out, although there were limitations. But I found that because of my interest and substituting materials, when there were no tables, cement blocks and plywood would do, just to get the centers up. And I found that the interest that I had from seeing how the children were benefiting it caused me to really put the ideas into practice and continue to put them into practice.

Q: What is good teaching for this age group?

A: I think good teaching for this age group is teaching which takes into account the needs of the children, their several abilities, their interest. Also teaching where the children are guided rather than totally directed and instructed in what to do. I believe also that good teaching for those children is teaching which they can really link together, and where they can see there is a connection in everything that they do at school during a particular day, during a particular term. I believe that good teaching for these is teaching which will help them to develop in every sphere of their lives. So that as they grow older and they go out to face the world, they would have found that all the things they would have learnt at school have some impact on the way that they have to live in the world in general.

Q: Are you in anyway influenced by parents?

A: I would not say that, not thus far. I find I am not influenced by the parents. I think it is the other way around. I think that they have seen how the program has been working, they have all expressed satisfaction with the way in which their children are learning. I have never met a parent who has complained. They always have words of encouragement, they are always there to help in what ever way that they can. And I have never had any complaints from anyone about the program. I usually explain to them what we are going to do, what we plan to do, and tell them what activities the children will be engaged in and why, and I find that they are always willing. Some of them even say to me they wish they were back at school now, they did not have such a good time, at school. I do not find that I am really influenced by the parents, not really.
Q: In what forum do you tell them or your plan of work?

A: Most of the time it may be in an informal setting. These parents, they usually bring their children to school, and they hang around. I encourage them to come into the classroom and they feel free, and I talk with them, let them see what the children are doing, invite them to come and see what is in the classroom, talk to them about what the children will be doing with the materials. And I find too that the children help a lot in that they go home and they say what they have been doing. And their enthusiasm spills over to the parents. For example, a couple weeks ago we had a discussion just on the empty fish bowl. Our unit, we were launching our unit on sea life, sea creatures and so on. So we talked just about the fish bowl - empty! And a parent met me and said to me, "What is all this about this fish bowl? This child is home just talking about a fish bowl, a fish bowl, all the things she can think of a fish bowl, and I was able to explain to her that we are launching this unit on sea life, and we talked about the fish bowl, the shape, what it is made of, it is transparent, everything like that. I find that the children spread the enthusiasm, parents pick it up and they go with it.

Q: What about Ministry's policy?

A: Well, they said they are all for early childhood education, that is debatable! But, since they have said they are all for it, I take it that they are all for it. So, I am allowing that to influence me to work on the early childhood program because they are saying that they are all for it.

Q: Why do you say it is debatable?

A: It is debatable in that, for example, you do not have the materials being provided, you do not have the space being provided, and I am also hearing that you only take under fives if there is space, if a teacher is provided, if there is furniture, so to me it is not like a priority. It is if all of these things are available. And chances are that they will seldom ever be available, you have to make them available. And that is why I say, it is debatable as to whether it is really that they are for early childhood. So far since it has been said that they are for early childhood education, I take it that they are and therefore I am working along with that.

Q: But in terms of implementing your teaching methods do you get full support from visiting officers?

A: Yes, I have never had a complaint, I think most of the time they are impressed.

Q: What about administration?

A: Well, initially, there was a lot of objection and I think that came because of lack of knowledge. Teachers could not understand, well quote, "what foolishness you were
doing? Because they were accustomed, like I said before, to teaching the under fives in the same manner in which the five year olds were being taught - chalk and talk, learn the ABC by rote, learn your numbers by rote, repeat them everyday, you know, that kind of teaching. So when the early childhood method was being attempted I found that there was resistance to it. I guess because like I said it was new, there was lack of knowledge, how can you teach for example, without using a chalkboard, without writing on a chalkboard? How will they learn their letters without repeating, A for apple, B for bat that sort of thing, and their numbers. So I think that because of a lack of knowledge there was a lot of resistance.

I have been fortunate that I have never had a Principal who has been openly resistant to the idea. And I think again it is because of the enthusiasm which I have and which spills over to the children, and because I can be quite determined. And if I think that it is a good idea I am going to go all out to show that it is a good idea. I am going to show you that it can work and it will work and it will work. So I have never had opposition from a Principal openly, but like I said, you will find members of staff and at times you might even find that they are reluctant in wanting to teach your class after you, when the children pass on to the following year. You will find people saying well they do not want that class because those children do not know anything. But in recent years I have found that people are begging to have the class that I have taught. the children are very disciplined, they are well mannered, they have good work habits, good work attitudes, you give them a task and they will complete it. And they will be looking for more. And I find that in recent times that people have been asking for the classes that I have taught.

Q: Were there any teacher education programs?

A: Well no, in that, not formally, but the Principal gave me permission to assist teachers who were interested, and I would do that. But they were some who were definitely not interested. But teachers who were interested I would help them to plan units, give them ideas for setting up their classrooms, and I would share with them what knowledge I have. And they are some who are interested, those who were interested, and they would come. If they found themselves in any little scrape they will come and they will ask me. And they will say I am planning to do such and such a unit and I need some poems, even up to this term, a teacher said to me, I am working on a unit of the family, you have any poems that you can assist me with. And some would come willingly, and I am able to help them but informally, but I have never had a formal training session with teachers. What I did once was to address a PTA session about the early childhood program, all that it entails what they can expect, methods that are used and things like that, the reasons for not pushing writing initially, and things like that. I did this at a PTA session for parents and teachers, but never in house.
Q: What do you think of three or four year olds in school?

A: I have no problems with it once they are not given formal instruction. I believe that at that age they need to learn how to socialize, they need to learn self discipline, they need to learn to care and share, you know, live in the world. And as long as they are not pushed to write, you know, complete the three Rs, I have no problem with them being in school at three or four. There is so much that they can do, in terms of muscle development, in terms of language development, I think that there is not a problem.

Q: What could be your goals for these children?

A: Well they would be goals, which would help them to develop totally. Physically, so they would have their physical activities; socially they have their small group activities, they work in groups and so on, have their discussions, activities that would cause them to work together. I would think in terms also of the need for intellectual stimulation. So that you have to set up a classroom that would be geared towards the introduction to language, words, numbers, print the introduction to print, which would stimulate their interest in the academics. I would have a goal based on developing their creativity, their aesthetics - drama, singing, music and movement, those sorts of things. I find children have those naturally. We need to encourage the development of them. Also morally, teach them moral standards and of course spiritual standards. So in all my goal would..., I would work towards helping them to develop the total person, rather than just intellectual or physical development.

Q: Do you think all teachers teaching this age group should be trained?

A: I believe all teachers should be trained, until you are formally trained you have an idea but with out that formal training in early childhood, that sort of rigid training, I do not think that you capture everything. I believe every teacher who is teaching in this age group should have formal training, teaching practice and everything.

Q: Do you think Erdiston is enough?

A: I think that is the beginning, I think Erdiston, especially with the one day release sessions and you have to be at school all the other days teaching and so on, I think that it is just the beginning. But I believe they should be continued education in early childhood, which we do not have at this time. We just have the programs at Erdiston, you complete those and there is nothing else. But I believe that training should be provided at a higher level, a degree level, Masters, as high up as you can go, so that you really have professionals out there teaching these children and turning out the kind of children that you really need to have. I think Erdiston is just but the beginning.
Q: How do you think these young children should be evaluated?

A: Well, I believe evaluation at this stage should be continuous and not just at the end of a session, you know like summative? - at the end of a session or whatever. There should be continuous evaluation, and you should be evaluating the process and not just the completed product. Because there are children, if you observe the process, and then you see the final product, the final product may be disappointing but when you observe the process you can see the thought that has been put into the particular activity. And therefore, I would go for continuous evaluation. Probably at the end of a term, the end of a year, you use more formal evaluation, summative but continuous evaluation throughout.

Q: What would you give the parents?

A: Well usually what I try to do is to have port folios, which contains sample of the children's work with comments on the children's work. The work is dated so that they can see the progress that has been made from month to month or week to week, however. I had also developed a report, which is different from what has been given by the Ministry of Education in that I do not use grades or marks, I use comments and I look at the areas that I mentioned I would use for my goals. I look at the children's creativity, I look at their interest in lessons, their participation, things like that. And they are also given that report along with the port folio. They are given that report.

Q: No objects on the use of report?

A: Well, I had discussed it with the Principal, and while I was on the early childhood course, they encouraged us to prepare reports. I did not do it while I was there, but when I left the course, after completing the course, and really studying the report, which you are given, I found that it was inadequate for these children. So I developed the report, the headteacher she did not give me any problem. We have been using it in the under fives.

Q: What about discipline and the use of the practices?

A: I have found to be honest with you that when you are using the early childhood program, discipline problems have been greatly reduced. You will get discipline problems if they have nothing to do. But the way that the program is structured there is always something to be done. So I find that discipline problems are minimal. The children in my class know that if they have completed their assignment and I am doing something with another child, they have to read a book, color, but they know that they have to do something. At times they may come and ask me if they could go to a particular center to get an activity but they know they have to do something once they have completed any particular task. So I find that discipline problems are minimal. But if there are discipline problems if you are having problems, I believe that, I find what works for me, first of all is to have a little talk, stern talk, telling them what I expect of them, asking them questions
so that they realize that what they are doing is out of order. do not tell them what they are doing is out of order, I would ask them questions - well do you think that if you do this, it will benefit you? Do you think if you make noise in the classroom that will help you to learn, or if you disrupt the class will it help you, help the other children? Help them to realize that what they are doing is not beneficial to them. I find that that works, other than that I find that what works is a time out for the child. I have two chairs there they come in very handy, (at the front of the class) how they hate to sit and face the class. And I usually say well okay, you come and sit and face the class and let them see your face, they do not like to sit in those chairs facing the class so that work as well.

Q: Flexible transfers as they relate to the common entrance examination- do you think it will impact on your use of the practices in the future?

A: It may, if it becomes mandatory, I really do not see a need to change at this time the reason being that children need a foundation. And if they are provided with an adequate foundation they will be able to do anything that follows so I really do not see there being this need to change. Giving formal instruction to three or four year olds does not mean that the children will perform any better than if they are given the opportunity to develop their muscles to develop their language to develop their ideas. Ideas are very important, and once they have the ideas, once they have the understanding, when it is time for formal work, all they have to do is write their ideas. If they are taught to write and they have no ideas they still will not be able to write. If they are not taught to reason they will still not be able to reason when the time arise for the transfer or the Common Entrance or whatever is there. So I think that right now I do not see a reason to change. I do not see why they should be a reason to change.

Q: What about parents as aids?

A: I have no problem with it, but again, I think there is a need for some sort of training. I do not think you can just bring a parent into the classroom and expect that they could do what you want them to do. I believe that there would have to be some kind of training. It maybe informal training inside the classroom between the parent and the teacher where you make ... you get them to understand exactly what you are doing, day to day, the things that they would need to do. But I believe that it would be a great help if you have teacher aids. I have no problem with it providing that the person is willing to assist and willing to take in the instruction and so on. I do not have a problem with it.

Q: What about teacher empowerment do you think it can work?

A: I believe it can work, there is a need for it. I think that teachers have to more or less do whatever they are told to do. There are times when a teacher should be allowed to use his or her initiative. Especially if you are trained in your particular field. and it is recognized that you have taken in the training. You know what you are about, I believe
you should be empowered to make decisions in your classroom and if needs be on the floor, in other classrooms. I believe it can work but the way our system is set up right now, I think we are still holding on to the line of authority the chain of authority. For now teachers are more or less told you have to do this, you have to do that, you have to do it this way. And if you are not a strong enough person, I think that you would bend and do, and say okay, I am frustrated and told it has to be done this way, I will just do it this way whether it works or not. But teachers need to be empowered in the classroom.

Q: What pupil to teacher ratio would you recommend?

A: My ideals would be about six children but I do not know how practical that would be. I guess it is not practical, therefore I would increase it to twelve, maybe fifteen, looking at the practical side. But since you asked for an ideal, I think the ideal should be a number that the teacher can be seated with the children, see everything that each child is doing and interact with each child on an individual level. And to be honest with you it can be a bit difficult doing that with fifteen children. But the ideal would be, I would say six but how practical that is, would be another matter.

Q: How do you determine what is correct in teaching these young children?

A: Well from observation, research that has been carrying out as to how these children learn information that has been provided I believe that we get a fair idea as to what is correct and what is not. The same way that we know what is healthy for our bodies and what is not from research, from observation, I believe in the same manner that we get to know what is best suited for these children.

Q: How you feel about using these practices and teaching this age group?

A: Well, I sort of have a liking for teaching that age group. Usually first term is the most difficult term in that they are now away from home, so you have to break that bond more or less. You have a lot of crying and some of them can be really upset. When they are separated from their mummy. So the first couple of weeks can be really difficult. And then some of them come from home unable to do anything, can not even recognize their bag, their lunch box, they can not tie their shoe lace, and all that. So you find you are actually mother. How many ever children you have if you have thirty that means thirty lunch boxes to be found every lunch time. If you have fifteen boys, fifteen zips to pull down and pull up at break time and that sort of thing. So the first term can be difficult, but after they have settled down and I begin to realize that they are taking in the information that is being given, they are participating they are talking with me, they are going home and discussing the things that they have learnt. Then you begin to feel good, to start to see the progress that is being made. So I like teaching them, okay, but just that the first term is really difficult. But by third term you see completely different children. You are able to see where they come from and where they are now. And one of the things
that I always tell myself I would do and I hope I would be able to do it, is to have a video tape of a class say like the first term and show them the last term when they think they are all so big and grown up and everything, you know.

I like teaching them, I like teaching the young children whether they are the actual three to fours or the five to sixes or whatever. I like teaching them.

Q: What would you recommend for that home to school transition?

A: I believe that if the children can be brought in at intervals during a term, so that they can spend a half day, maybe a day. Most of them have brothers and sisters, cousins whatever at school, if they can be brought in a half day, a day to mingle with the children, and get a feel of it. And then by the time they are ready to come into school I think it would be like, just home away from home.

But picture, they are home all the time and on this particular day, they are just dressed in these particular clothes, taken to this strange building, see these strange people and left there with these strange people. So I would suggest that they be brought in. It could be the third term, if they are going to come in first term. During the third term at intervals, have them staggered, bring in a few each week, however the Principal sees it fit, I think the transition would be easier.

Q: Has it ever been done?

A: No, the only thing that I recommended that has been done is to have a day orientation, but usually that is like the week before school is opened, when the parents and the children come to the school and they get to meet the teacher and the Principal, and they get to know the rules and so on. Again the parents are there with the children, it is not like mummy is not here. So that does not solve the problem, that is more or less for the parents because then... usually if I am the teacher I take the opportunity to talk with the parents and let them know what I am going to be doing and so on, things that I would need them to do. But as far as the children are concerned, the children are still there with mummy and therefore the break is not there. But I think it would have to be done without the parents, initially an hour, two hours? You know increase it, half day? And they should be okay.

Any other changes/comments/additions?
Appendix G

The elicited constructs organised under five major categories or themes by the researcher.

**Consideration of the Child**

*Takes child into consideration/Does not consider child*
Use if child is ready/Child not ready
Activities centred around child/Centred on real life
Suits the 3-4s? Should not be used often
Focuses on child/Focuses on academics
Child is free/Child is told what to do
Uses the children's experience/Choose a topic randomly
Very difficult for young children/Very easy
Emphasis on child/Emphasis on whole class
Focuses on child/Blanks out child
Concentrated on age/Concentrated on ability
Get it out of the child/Child not learning
Working together/Individual
Interactive play/Solitary play
Appeals to children/Unappealing
Child uses senses/Lack of use of senses
Child helps with choices/Inability to make choices
Children too young for/Mature
Focuses on the child/Not thinking of the child's needs
Helps to understand the child/Have no care of child's interest
Individual differences/Similarities
Confuse children/Clarify concepts
Children need/Children do not need
Educate parents/Leave them ignorant
Like parents to have a part/Cannot get parents to understand

**Classroom Experiences**

*As long as there is space or material/Inadequate space or material*
Depends on facilities/No control over physical
Need to get going/Stay disorganized
Provides opportunities/Not meaningful
Do a lot of/Neglect
Involvement/Stay away from
Difficult/Easy access
Done most of the time/Not always possible
We try to do/Unable to complete
So much come out/Not much comes out
I try/Unable to do
In the process of doing/Have already
Can be a problem/Easily done
Inadequate/Gets around to individuals
No attention to individuals/Help teachers to plan
Easy for teaching/More complex
Harder for teacher/I like to teach
Cannot teach like this/Depends on the child
More manageable/chaos
Provides opportunities/Limited experiences
Creates problems/Shouldn't have problems
Broadens scope/Limited
Given time for/Limited
What I do/What I don't do
More convenient to have/Inconvenient to have
We do/We do not
We do/Not done
This will come in/Left out
A lot of talking/Limited conversation
Challenging/Not challenging
How you teach/How you do not teach
Use for explaining/Not used for explaining
Times when used/Times when not used
Motivates/Does not motivate
Listens to teacher/pays no attention
Teacher directly involved/Free choice
Makes teaching interesting/Teaching uninteresting
What I do/What I don't do
Works well/Does not work well
Teacher directed/Free choice
Provides better experiences/Not exposed
Interesting/Disinteresting
Needs lots of help/Need little help
What we do/What we should not do
Need to know what is happening/Unaware of happenings
Very interesting way to teach/Not interesting
Very effective/Ineffective
Work well/Does not work well
Turn off/More exciting or turn off
Friendly atmosphere/Frightening for the child
Greater interaction/No great interaction
Lots of things come out/Lots of things do not come out
Find self using/In need of
Not interesting/Interesting
Tell you/Hides involvement
Sometimes you need/Do not need it
Not done regularly/Done frequently
Sometimes necessary/Sometimes not needed
Lots of use of/Seldom used
The same thing/Variety
Interesting way of teaching/Boring
Fresh/More rigid
Take you anywhere anyhow/Rigid
Less routine-Meandering/Rigid
Successful/Failure
Progress/Regressing
Perform better/Hinders progress
Difficult/Easy
We do a lot of/We do not do a lot of
We give/We do not give
I use/I do not use
Cannot handle/Grasps
Often used/Not used regularly
Make planning easier/Planning difficult
Make time for/Don't have time for
Easier to do/More difficult
Love/Do not love a whole lot
I believe/I do not believe
Okay/Not okay
Makes me feel good/Feel useless
My way/System way-education
I want to/Not a great lover of
Like/Do not like
Believe in/Do not believe in
I believe/I disagree
I like/I dislike
Want/Do not want
Like this/Prefer not to use
I prefer/I do not prefer
I like/Dislike
Quite interesting/Disturbing
I love to teach/Would not want to teach
I like/Dislike
Prefer/Do not prefer
Usually helps/Hinders
Do not need/Need
Stilted/Assist
Should be used/Should not be used
Teaching through this method/Not using these method
These are good/Irrelevant
Should not be major thing/Very relevant
Early childhood involves/Does not focus on
Emphasis is on/Lack of emphasis
Has a place/Has no place
Need more of/Need less of
Method of teaching in early childhood/Haphazarded
On its own/Grouped with something
A bit of/A lot of
Very little of/Plenty
Appropriate/Not appropriate
Should be a place for/Not necessary
Need a lot of this/Few or none at all
Should have/Cannot have
Move towards/Move away
Ideal/Restricted
Have/Do not have
Do/Do not do
Want/Do not want
Helpful/Not helpful
Used/Not used
Must be done/Must not be done
Deleted or taken/Included
Taught/Not taught
I have to use/Seldom use
Better to have/Use little of
Plays part in teaching/Little or no part
Not really done/Should be implemented
Not always possible/More adequate
Less meaningful/Cannot work well
This will come in/Not applicable
Can have/Don’t have
Can be used/Cannot be used
Has it place/Out of place
Get a lot of/Limited amount
Can have/Cannot have
Have advantages/Have disadvantages
Not enough of/Too much
Freedom/Too rigid
Good to have/Not necessary
We get a lot of/Restricted
We cannot get/Have a lot of
Need to/I would not have
Yes/No
Will give it a try/I am not for this
Have/Do not have
We can have/We cannot have
Emphasis/No emphasis
Basic things/Secretary things
Should be used/Should not be used
Meaningful/Not meaningful
Must be a part of teaching/Should not be done
High on the list/Not as important
There is a place for this/There is no place for this
Free but structured/Children do as they like
Concepts taught through manipulation/Rote learning
Real life activities/Fantasies
Concrete activities/Abstract
Free choice/Teacher directed or initiated
Informal program/Reflect Formal learning
Structure teaching/Informal teaching
Practical things/Abstract
School curriculum/Free choice
More structured/Informal
More informal/Less Informal
Informal/Rigid or formal
Informal setting/Very formal
Given free choice/Formal way
Informal/No great amount of formality
Informal method/Formal method
Formal work/Activity oriented
Flexible/Too structure
Needs a structure/Free involvement
Free choice/Formal
Not free to move/Free to move
Flexible/Rigid
Flexibility/No flexibility
Relates to real life/Unnatural situations
Done in an integrated way/Separated
Teach one subject/Different activities
Incorporate more subject areas/Focuses on one topic
Include all subject areas/Individual subject
Easier way of doing lots of subjects/Complex ways of doing
Related/Unrelated
Blends itself in/Does not fit in
Isolation/Integration

Benefits to the Under-fives

Creative/Stunts creativity
Expression/No freedom of expression
Children remember more/Very little is learnt
Child's interest is there/Interest not there
Child finds out/Telling them
Children enjoy/Bored & disruptive
Helps with enjoyment/creates boredom
Child is comfortable/Child is uncomfortable
Child feels secure/Child is insecure
All round development/Limited development
Children understand/Children do not understand
Comes from within child/Taught to the child
Brings out individual/Catering to class
Shows child's likes/Shows what child hates
Uses child's initiative/Uncertain
Children involved/Abstract & talking about
Child enjoys/Child does not enjoy
Focuses on strength & weaknesses/Fails to pick up strength and weaknesses
High participation/Little or no participation
Caters to all round development of child/Develops one sided child
Creativity/Boredom/Frustration
Maximum benefit/Hindrance
For Socializing/Shows indiscipline
More effective for slow learning/Not as effective
Brings out skills of child/Restricts child
Develops independence/Dependence
Children can relate to/Keeping them sheltered
Brings out creativity/Lack initiative
Children tend to listen/Less cooperative
Children like/Children dislike
Children are not bored/Children less responsive
Learn to cooperate/Selfish
Get more out of the child/Get less out of the child
Give individual attention/Does not give individual attention
Helps the shy child/Does not help the shy child
Allow to do for self/Dependent
Get more out of the child/Do not get as much
Children relate to/Difficult in imagining
Caters to individual differences/Complete use of whole method
Benefits children/Does not benefit
Children more involved/Children less involved
Develops initiative/Lack of initiative
Builds character/Does not build character
Children benefit/Children do not benefit
Cater to children’s ability/Do not cater to children’s ability
Children can relate to/Children cannot relate
Children remember better/Children forget easily
Assist the child/Hinders
Motivates/Turn them off
Meet the needs of the child/Do not meet the need of the child
Develops required skill/Certain skills not developed
Allows child contribution/Passive learner
Provide social development/Retard social development
Child gains skills and knowledge/Depress knowledge and skills
Develops whole child/Develops parts of the child
Children learn to make choices/Dependent on others
Relaxes the child/Suppresses emotions
Provides a sense of fulfillment/Low self esteem
Caters to needs of child/Not appropriate
Shows how skills develop/Unaware of slow development
Help with language development/Retard language development
Easy to comprehend/Hard to grasp
Identifies child difficulties/Does not identify difficulty
Children learn quickly/Children do not
Fits into early childhood teaching/Would not belong
Cannot beat this/Not as effective
Think strongly about/Little regard for
Has its place/Does not have a place
Done on a small scale/Done regularly
Always be use/Used as needed
Has to be/Settle for
Important/No great emphasis
It helps/Not as important
Building up/Mediocre
Has its place/Not very important
Lots of/Little of
Need/Do not need
Not as popular/Regular
Very important/Secondary
Very important/Discarded
Advocated/Not advocated
Has its place/meaningless
What we do in early childhood/What is not done
What we do/Not done
A key factor in early childhood/Unimportant
Sometimes need to use/Has no place in early childhood education
More effective/Less effective
Best to have/Not important
Would not advocate/Advocate
Lost without this/Not important
Make no sense/Interesting
Not the most important thing/Most important
Important/Unimportant
Way out of line/Important
Meaningful/Senseless
Very important/Not important
Very crucial/Unimportant
Important/Unimportant
Very important/Not as important
Encourage learning/Discourages
Has lasting impression/Make no impact
Allows reasoning/No reasoning
Learning take place/No learning takes place
Can hear unexpected/Hear nothing near
Objectives are achieved/Objectives unachieved
Child is learning/Teacher directed
How they learn/Parents learning
Children learn a lot/Children learn little
Shows relationships/Does not show relation
Learning tied together/Segregates learning

Teacher's versus Child's Dominance
Child initiated/Teacher initiated
Everything from teacher/Children involved
Teacher determined/Child initiated
Child decides/Teacher decides
Children totally involved/Teacher dominates
Children chose/Teacher chooses
Children are doing/Teacher is doing
Children choose/Telling them what to do
Child sets pace or tone/Teacher in control
Child is prime/Teacher is prime
Child free to choose/Teacher chooses
Easier for teacher/Difficult for child
Children do what they like/Dictating what children do
Child centred activities/Teacher directed
Done by the child/Done by the teacher
Children learn from each other/Children learn from the teacher
Teacher presenting/Taking from the child
Teacher controls/Child controlling
We give it to the children/Drawing from the child
Teacher directed/Child directed
Focuses on child's likes and dislikes/Focuses on teacher performances

Traditional Academic Focus

Old time method/Something new
Old time method/Child centred method
Before early childhood course/After course
Has improved/Old time stationary
Gearing for 11+/Focusing on living with others
Preparing for reception/Does not prepare
Prepares for formal school/Prepares for life
### Appendix H

**Repertory Grid Analysis for Individual Teachers**

**Ingrid’s repertory grid and principal components analysis**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>usually helps</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>would not advocate</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>not interesting</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>do not need</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>way out of line</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>salted</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>tells you</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>needs a structure</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>best to have</td>
<td>9</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>free choice</td>
<td>10</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>prefer</td>
<td>11</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>child is learning</td>
<td>12</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>it should be used</td>
<td>13</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>lost without this</td>
<td>14</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>what we do in early childhood</td>
<td>15</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>makes no sense</td>
<td>16</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>teaching through this method</td>
<td>17</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>these are good</td>
<td>18</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>caters to individual differences</td>
<td>19</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>interactive play</td>
<td>20</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>sometimes you need</td>
<td>21</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>children learn from each other</td>
<td>22</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>not done regularly</td>
<td>23</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>should not be major thing</td>
<td>24</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>sometimes necessary</td>
<td>25</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>'</td>
<td>'</td>
<td>'</td>
<td>'</td>
<td>'</td>
<td>'</td>
<td>'</td>
<td>'</td>
</tr>
<tr>
<td>not the most important</td>
<td>26</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>a key factor in early childhood</td>
<td>27</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Grid 1:** Ingrid’s repertory grid showing the ratings of the supplied elements on elicited constructs
Map 1: Ingrid’s principal components analysis of supplied elements rated on elicited construct

The repertory grid shows twenty-seven constructs elicited from Ingrid, a primary trained teacher in the 30-39 age group who at the time of the study was teaching the 3-4 year olds at a city/urban nursery school. Ingrid, who completed a one-year certificate course in ECE, had been teaching for just less than twenty years.

Ingrid’s principal component map shows two main groupings of elements and constructs. The first two principal components accounted for 97% of the variance while the third account for 0.93%. In group one the elements Integrated Approach, Concrete, Child Initiated, Real Life Objects, Free Choice, Child Centred, Informal, Small Groups, Individually are very closely related and highly associated with constructs Child is learning, These are good, Caters to individual differences, Most important, Very relevant, Advocated, Important, Interesting.
Teaching through this method, Lost without this, Prefer, It should be used, Free involvement, Sometimes necessary, Children learn from each other, Formal, hides information, Usually helps, Sometimes you need, Need, Assist, Best to have, A key factor in ECE, Interactive play, Done frequently and What we do in early childhood. Parent Involvement can be regarded as relatively unimportant in Ingrid's construing, as it was not highly loaded on a factor. Ingrid construed Teacher Directed as important as the other elements.

In group 2, the elements Formal, Structured, Whole Group, Abstract Material, Separate Subjects and Academic Focus are closely associated and near to the constructs Irrelevant, Sometimes not needed, Children learn from the teacher, Not done regularly, irrelevant, Complete use of whole method, Not the most important thing, Should not be a major thing, Would not advocate, Formal, hides information, Way out of line, Not interesting, Not using these methods, Not important, Do not prefer, Hinders, Should not be used, What is not done, Do not need it, Stilted, Not important, Unimportant, Makes no sense, Solitary play and Teacher directed. The construct Needs a structure seem a relatively important construct in Ingrid's construing.
<table>
<thead>
<tr>
<th>Children totally involved</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>I believe</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Okay</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Get a lot of</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Meaningful</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>We use</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Can have</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Focuses on child</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>This comes in</td>
<td>10</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Have advantages</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Not enough of</td>
<td>12</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Freedom</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Child is comfortable</td>
<td>14</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Child feels secure</td>
<td>15</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>A lot of talking</td>
<td>16</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Allows reasoning</td>
<td>17</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>All round development</td>
<td>18</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Makes me feel good</td>
<td>19</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Challenging</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Children totally involved</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Teacher dominates</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Angela's repertory grid and principal components analysis:

- Structures
  - Formal
  - Concrete
  - Real Life Objects
  - Abstract Material
  - Whole groups
  - Small groups
  - Individually
  - Parent involvement
  - Free Choice
  - Informal
  - Child Centred
  - Academic Focus
  - Separate Subject
  - Integrated Approach
  - Teacher Directed
  - Child Initiated

Subfactors:

- Informal: 3
- Centred: 1
- Parent Involvement: 3
- Abstract Material: 3
- Whole groups: 1
- Small groups: 1
- Individually: 1
- Free Choice: 1
- Child Initiated: 1

Informal: 3
Centred: 1
Parent Involvement: 3
Abstract Material: 3
Whole groups: 1
Small groups: 1
Individually: 1
Free Choice: 1
Child Initiated: 1
Map 2: Angela’s principal components analysis of supplied elements rated on elicited constructs

The repertory grid shows nineteen constructs elicited from Angela, a teacher in the 40-49 age group who at the time of the study was teaching the 3-4s at a city / urban nursery school. Angela, a primary trained teacher, who had been teaching for over twenty years had also completed a two-year certificate course in ECE.

Angela’s principal components analysis shows two groupings between the constructs and the elements. The first two components account for 85% of the variance and the third component another 4.68%. In group 1 of the principal component map Child Centred, Informal, Small Group, Free Choice, Real Life Objects, Child Initiated, Individually, Integrated Approach, Teacher Directed and Parent Involvement are closely related and near to Challenging, I believe, Not enough of, Have advantages, Get a lot of, Okay, Meaningful, Freedom, Child feels secure, Child is comfortable, Can have, This comes in, A lot of talking.
Makes me feel good, Not enough of, Allows reasoning, We use, Focuses on the child, Have advantages, Meaningful, Okay, Children totally involved, Challenging. All round development and Limited development seem to be relatively important constructs in Angela’s construing as was the element Separate Subject, which are all highly loaded on the first two components.

In group 2 the elements Formal, Whole Group, Structured, Abstract Material and Academic Focus are closely associated and near to constructs Teacher dominates, Too rigid, Not Challenging, Cannot Have, Have disadvantages and Child is insecure, No reasoning, Have disadvantages, Limited amounts, Limited conversation, I do not believe, Senseless, Child is uncomfortable, Left out, Feel useless, Focuses on academics, Not okay, I do not believe, Limited amount and Too much. Element Concrete, which is near to the centre, seems a relatively unimportant element to Angela, as it was not highly loaded on either component.
<table>
<thead>
<tr>
<th>Informal program</th>
<th>Early childhood involves</th>
<th>Lot of use of</th>
<th>Emphasis is on</th>
<th>Flexibility</th>
<th>Isolation</th>
<th>Benefits children</th>
<th>Children more involved</th>
<th>Appeals to children</th>
<th>Child uses senses</th>
<th>Learning tied together</th>
<th>Child helps with choices</th>
<th>Develops initiative</th>
<th>Builds character</th>
<th>Has a place</th>
<th>Children benefit</th>
<th>Children too young for</th>
<th>Need more of</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

1. Reflects formal learning
2. Does not focus on
3. Seldom used
4. Lack of emphasis
5. No flexibility
6. Integration
7. Does not benefit
8. Children less involved
9. Unappealing
10. Lack of use of senses
11. Segregate learning
12. Inability to make choices
13. Lack of initiative
14. Does not build character
15. Has no place
16. Children do not benefit
17. Mature
18. Need less of
Map 3: Deborah's principal components analysis of supplied elements rated on elicited constructs

The repertory grid shows eighteen constructs elicited from Deborah, a primary trained teacher in the 30-39 age group who, at the time of the study, was teaching the 3-5s at one of the rural primary schools. Deborah completed a two-year certificate course in ECE as well as a correspondence degree programme (LCP, ACP).

The principal component map shows the groupings of elements and constructs. The principal components analysis indicated that the first two components accounted for 83% of the variance and the third component accounts for a further 4.67%. In group 1 the elements *Free Choice, Child Centred, Real Life Objects, Individually, Informal, Parent Involvement, Integrated Approach, Child Initiated* and *Concrete* are near to the constructs *Has a place, Informal program, Need more of, Integration, Flexibility, Builds character, Learning tied...*
together, Benefits children, Appeals to children, Emphasis is on, Lot of use of, Develops initiated, Child helps with choices, Early childhood involves, Child uses senses and Children more involved. Element Small Groups is a relatively unimportant element to Deborah, as it was not highly loaded on either component.

In group 2 Deborah also associated the elements Formal and Structured with Lack of initiative, Children less involved, Inability to make choices, Does not focus on early childhood, Lack of emphasis, Lack of use of senses, Does not build character. Elements Academic Focus and Whole Group are near to the constructs Isolation, Children do not benefit, Does not benefit, Segregates learning, No flexibility, Seldom used, Children too young for, Reflects formal learning. Elements Teacher Directed and Separate Subject are important in Deborah construing of the practices. The element Abstract Material is near to Need less of and Unappealing.
Sonia's repertory grid and principal components analysis

Grid 4: Sonia's repertory grid showing the ratings of the supplied elements on elicited constructs
Map 4: Sonia’s principal components analysis of supplied elements rated on elicited constructs

The repertory grid shows that Sonia supplied twenty-seven constructs in her construing of the practices. Sonia, a primary trained teacher in the 40-49 age group, who had been teaching for more than twenty years, had no formal training in ECE. At the time of the study she was teaching the 3-4 year olds at one of the rural primary schools.

Her principal components analysis indicates that the percentage of variance for the first two components is 84% and the third component accounts for a further 5.29%. The principal component map indicates the two main clusters in the Angela’s construing of the elements. In group 1 the close clustering of elements and constructs indicates that practices Free Choice, Small Group, Individually, Concrete, Parent Involvement, Informal, and Integrated Approach, Teacher Directed, Child Centred, Real Life Objects, Structured, Child Initiated, Separate
Subject, are closely associated and near to Individual differences, Children can relate to, Clarify concepts, Meet the needs of the child, Children remember better, How they learn, Motivates, Individual attention, Caters to children ability, Concrete activity, I believe, Plenty, Child directed, We give, Successful, A lot of, Real life activities, Children need, Progress, I like, We do a lot of, I use, Grasp, Perform better, Assist the child and Easy.

In group 2 the constructs Children learn little, Does not cater to children ability, Children cannot relate, Prevents learning, Do not meet the needs of the child, I disagree, Very little of, Child directed, We do not give, Confuse children, Failure, A bit of, Fantasies, Children do not need, Failure, Regressing, I dislike, We do not do a lot of, I do not use, Cannot handle, Hinders progress, Hinders, Turns them off, Prevents learning, Whole class, Children forget easily and Difficult are closely associated and near to the element Academic Focus, Formal. The elements Formal, Abstract Materials and Whole Groups and the construct Abstract is highly loaded on the vertical factor and so can be regarded as relatively important in Sonia’s construing of the practices.
<table>
<thead>
<tr>
<th>Grid 5: Veronica's repertory grid showing the ratings of the supplied elements on elicited constructs</th>
<th>Veronica's repertory grid and principal components analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>not as popular</td>
<td>regular</td>
</tr>
<tr>
<td>find self using</td>
<td>2 in need of</td>
</tr>
<tr>
<td>do a lot of</td>
<td>neglect</td>
</tr>
<tr>
<td>Involvement</td>
<td>stay away from</td>
</tr>
<tr>
<td>difficult</td>
<td>easy access</td>
</tr>
<tr>
<td>concentrated on age</td>
<td>concentrated on ability</td>
</tr>
<tr>
<td>we try to do</td>
<td>unable to complete</td>
</tr>
<tr>
<td>children relate to</td>
<td>difficulty in imagining</td>
</tr>
<tr>
<td>we get a lot of</td>
<td>restricted to</td>
</tr>
<tr>
<td>I try</td>
<td>unable to do</td>
</tr>
<tr>
<td>we cannot get</td>
<td>have a lot</td>
</tr>
<tr>
<td>in the process of doing</td>
<td>have already</td>
</tr>
<tr>
<td>need to</td>
<td>13 I would not like</td>
</tr>
<tr>
<td>get it out of the child</td>
<td>child not learning</td>
</tr>
<tr>
<td>can be a problem</td>
<td>easily done</td>
</tr>
<tr>
<td>educate the parent</td>
<td>leave them ignorant</td>
</tr>
<tr>
<td>need to get going</td>
<td>stay disorganised</td>
</tr>
<tr>
<td>Structures</td>
<td>Form</td>
</tr>
<tr>
<td>Concrete</td>
<td>Real Life Objects</td>
</tr>
<tr>
<td>Abstract Material</td>
<td>Whole groups</td>
</tr>
<tr>
<td>Small groups</td>
<td>Individually</td>
</tr>
<tr>
<td>Parent Involvement</td>
<td>Free Choice</td>
</tr>
<tr>
<td>Teacher Directed</td>
<td>Child Initiated</td>
</tr>
<tr>
<td>Child Centred</td>
<td>Academic Focus</td>
</tr>
<tr>
<td>Separate Subject</td>
<td>Integrated Approach</td>
</tr>
</tbody>
</table>
Map 5: Veronica’s principal components analysis of supplied elements rated on elicited construct

The repertory grid shows seventeen constructs elicited from Veronica, an untrained teacher in the 20-29 age. She had been teaching for just over five years and at the time of the study was teaching a mixed group of 3-5 year olds at a rural primary school. with Regular on the opposite pole.

Her principal components analysis indicates a general spread of the elements and constructs. The percentage of variance for the first two components accounts for 46% of the variance and the third component further 13.87%. This low variance suggests that the groupings are not really close. Some loose associations include group 1 where the element Separate Subject is near to In the process of doing, Neglect.
In group 2 the element *Formal* is near to *Concentrated on age* and *Whole Groups* is associated with *We get a lot of, I would not like*. In group 3 the elements *Teacher Directed* and *Academic Focus* are associated with *Stay away from, Can be a problem, Difficult*. In group 4 the elements *Concrete, Small Groups, Parent Involvement* are associated with *Easy access, easily done, Involvement, Unable to do, We cannot get, We try to do*.

In group 5 the elements *Free Choice, Informal, Integrated Approach, Individually*, which are near to *Need to, Need to get going, Educate the parent, Children relate to, Unable to complete*. In group 6 the elements *Child Centred and Child Initiated* are associated with *Get it out of the child*.

On the map there were four constructs that were highly loaded on either factors and seemed relatively important in Veronica’s construing of the practices, these include *In need of as* opposed to *Find self using and Regular as opposed to Not as popular*. 
Diana’s repertory grid and principal components analysis

Grid 6: Diana’s repertory grid showing the ratings of the supplied elements on elicited constructs
The repertory grid shows twenty-three constructs elicited from Diana, a primary trained teacher in the 40-49 age group who also completed a one year course in ECE. Diana taught at the primary level for over twenty years and at the time of the study was teaching the 3-4 year olds at a rural primary school.

Her principal component map shows her groupings of the constructs and the elements. The percentage of variance for the first two components is 80% and the third component accounting for another 5.72%. In group 1 the main cluster on the left-hand side comprises elements Small Groups, Free Choice, Integrated Approach, Child Centred, Concrete, Informal, Individually that are near to Get more out of the child, Need, Lots of things come out, Like, Its helps, My way,
Friendly atmosphere, Has to be, Important, Always be used, I want to, More exciting/turn on, Allow to do for self, Child centred activities, Given free choice, Informal method, Done by the child, Has its place, Believe in, and Building up.

In group 2 the elements Teacher Directed, Structured, Whole Groups are near to Formal way, Done by the teacher, Dependent, Teacher directed, Abstract, Do not believe in, Little of, Do not get as much, Mediocre, Do not need, Lots of things do not come out, No great interaction, System way- education, Frightening for the child, Not a great lover of, and No great amount of formality. Elements Separate Subjects and Academic Focus are near to Not as important, Used as needed, Settled for, Do not like, Turn off, and No great emphasis. The element Formal is important in Diana’s construing of the practices. Parent Involvement and Real Life Objects seem fairly important in Diana’s construing.
Lucille’s repertory grid and principal components analysis

<table>
<thead>
<tr>
<th>High on the list</th>
<th>Very important</th>
<th>Not as important</th>
<th>Get more out of</th>
<th>More important</th>
<th>Less important</th>
<th>There is no place for this</th>
<th>We do not</th>
<th>Not as important</th>
<th>Very important</th>
<th>More important</th>
<th>Less important</th>
<th>There is no place for this</th>
<th>We do not</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Grid 7:** Lucille’s repertory grid showing the ratings of the supplied elements on elicited constructs
Map 7: Lucille's principal components analysis of supplied elements rated on elicited constructs

The repertory grid shows nineteen constructs elicited from Lucille, a primary trained teacher in the 50+ age group who had done a one-year course in ECE. Lucille taught at the primary level for over twenty years and at the time of the study was teaching the 3-4 year olds at a rural primary school.

The principal component map shows groupings of the construct and elements. The percentage of variance for the first two components is 85% and the third component accounts for a further 6.4%. In group 1 the analysis shows one distinct group of elements. These include Whole Group, Individually, Child Initiated, Real Life Objects, Informal, Child Centred, Free Choice, Concrete, Small Groups, and Teacher Directed, which are closely associated and near to I believe in, Very interesting way to teach, So much comes out, There is a place for this, Get more out of the child, Cannot beat this, Very important, Will give it a
try, Very effective, We do, Works well, High on the list, Give individual attention, Preparing for reception, Has its place, Think strongly about, Yes, We do, Work well, Helps the shy child, Give individual attention and Done regularly.

The elements in group 2 are scattered, inferring an unstructured construing of Parent involvement, Academic Focus, Separate, Abstract Materials, Formal and Structured. These elements are associated with constructs such as Does not work well, We do not, Not as important, Ineffective, I'm not for this, No, Does not have a place, Have little regard for, Not as important, Not as effective, There is no place for this, Get less out of the child, Not very interesting, Not much comes out, I do not believe in.
Monica’s repertory grid and principal components analysis

<table>
<thead>
<tr>
<th>Elements</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children can relate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Provides better experience</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>Brings out creativity</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>Children tend to listen</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>Can hear unexpected</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Interesting</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>Children are not bored</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>Easier way of doing lots of subjects</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Focuses on child</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>Related</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>Learn to cooperate</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>What we should do</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>What we need</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Needs lots of help</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>Related</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
</tr>
<tr>
<td>Learn to cooperate</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td>32</td>
</tr>
<tr>
<td>Related</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>What we need</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td>32</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>Needs lots of help</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td>32</td>
<td>33</td>
<td>34</td>
<td>35</td>
</tr>
</tbody>
</table>

Grid 8: Monica’s repertory grid showing the ratings of the supplied elements on elicited constructs
Map 8: Monica’s principal components analysis of supplied elements rated on elicited constructs

The repertory grid shows twenty constructs elicited from Monica, a primary trained teacher in the 30-39 age group. Monica who had been teaching for twenty years and who was teaching the 3-4 age group at a rural primary school had not been trained formally in ECE.

The first two components in her principal components analysis accounts for 71% of the variance and the third component accounts for another 9.19%. The principal components analysis indicates the associations between the elements and the constructs in Monica’s construing of the practices. The map shows three groups. In group 1 the elements Child Centred, Informal, Free Choice, Parent Involvement, Concrete, Real Life objects, Small Groups, Individually are near to constructs Need lots of help, Focuses on living with others, Brings out creativity,
Can hear the unexpected, Children do what they like, Children are not bored. 
Focuses on the child, Children can relate, Children like, Provides better experiences, Blends itself in, Interesting, Children tend to listen, Related, and What we do. In another group element Integrated Approach is associated with Shows relationships.

In group 2 the elements Academic Focus, Abstract Material are important in Monica’s construing. The constructs Does not show relation, Complex ways of doing, What we should not do, Unaware of what happenings, Unrelated, Less co-operative are associated with these two elements and close to Whole Groups.

In group 3 the elements Structured, Formal, Teacher Directed are near to Learn to co-operate, Gearing for 11+, Need little help, Keeping them sheltered, Children less responsive, Dictating what children do, Hear nothing new, Lack initiative, Blanks out the child, Children dislike, Disinteresting. Element Separate Subjects is associated with Does not fit in and Not exposed.

Constructs Objectives unachievable and Objectives are achieved and element Child Initiated was highly loaded on one factor and relatively important in Monica’s construing of the practices.
Iris's repertory grid and principal components analysis

<table>
<thead>
<tr>
<th>Criteria to all-round development of child</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old method</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Must be a part of teaching</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Teacher directed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Emphasis on child</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Creativity</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Depends on facilities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Easier for teacher</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>For localization</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>More effective for slow learners</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Brings out skills of child</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Develops independence</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
</tbody>
</table>

Grid 9: Iris's repertory grid showing the ratings of the supplied elements on elicited constructs
Map 9: Iris's principal components analysis of supplied elements rated on elicited constructs

The repertory grid shows fifteen constructs elicited from Iris, a primary trained teacher in the 40-49 age group who had been teaching for over twenty years. Iris, who was teaching the 3-4 age group in a rural primary school at the time of the study, had completed a one-year certificate course in ECE.

Principal components analysis reveals the groupings of the elements and the constructs. The first two components account for 62.37% of the variance and
the third component accounts for a further 14.7%. The map shows two main groups. In group 1 the elements Real Life Objects, Individually, Structured, Small Groups are associated with constructs Important, Creativity, Develops independence, Caters to the all round development of the child, Emphasis on child, Maximum benefit, Brings out skills of child, Must be a part of teaching and More effective with slow learners. Elements Formal, Abstract Material, Concrete, Child Centred are near to For socializing and Depends on facilities. Element Child Initiated is near to Difficult for the child.

In group 2 the elements Academic Focus, Whole Group are close to Boredom/Frustration, Unimportant, Emphasis on the whole class, Develops one sided child, Not as effective, Should not be done, Restricts child, Show indiscipline, Free Choice, No control over physical and Unimportant.

Elements Separate Subject and Free Choice are associated and important in Iris’s construing of the elements. Element Parent Involvement is near to Individual subjects. Elements Teacher Directed, Child Initiated, and the constructs Easier for the teacher, Old method, Something new, Includes all subject areas were highly loaded on one factor or the other, and can be regarded as relatively important in Iris’s construing of the practices.
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>child sets pace/tone</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>child in control</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>child is prime</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>child free to choose</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>informal setting</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>child enjoys</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>we can have</td>
<td>7</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>makes teaching interesting</td>
<td>8</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>focuses on strengths/weaknesses</td>
<td>9</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>very difficult for young children</td>
<td>10</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>flexible</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>incorporates more subject areas</td>
<td>12</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>what I do</td>
<td>13</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>works well</td>
<td>14</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>emphasis</td>
<td>15</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>prepares for formal school</td>
<td>16</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>basic things</td>
<td>17</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>should be used</td>
<td>18</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>meaningful</td>
<td>19</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>high participation</td>
<td>20</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>provides opportunities</td>
<td>21</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Merrie's Repertory Grid and Principal Components Analysis**

- Structured
- Formal
- Concrete
- Real Life Objects
- Abstract Material
- Whole groups
- Small groups
- Individually
- Parent Involvement
- Free Choice
- Informal
- Child Centred
- Academic Focus
- Separate Subject
- Integrated Approach
- Teacher Directed
Map 10: Mertie’s principal components analysis of supplied elements rated on elicited constructs

The repertory grid shows twenty-one constructs elicited from Mertie, a primary trained teacher in the 40-49 age group who had been teaching for over twenty years. She completed a one-year diploma course in ECE and at the time of the study was teaching the 3-4 age group at one of the rural primary schools.

The principal components analysis shows the groupings between the elements and the constructs. The first two components account for 67.66% of the variance and the third component accounts for a further 10.12%. In group 1 the element *Child Initiated* is associated with constructs *Child free to choose*. In group 2 the elements *Free Choice* and *Child Centred* are close to *Child is prime*, *Child in control*, *Child sets the pace/tone*, *Child enjoys* and *Prepares for life*. In group 3 the elements *Concrete*, *Real Life Object*, *Whole Groups*, *Informal*, *Small Groups*, *Integrated Approach*, *Individually* are associated with *High*.
participation, Informal setting, Very easy, Provides opportunities, Meaningful, We can have, Works well, Should be used, Flexible, What I do, Makes teaching interesting, What I do, Focuses on strength and weaknesses, Incorporates more subjects

In group 4 the elements Separate Subjects, Formal and Structure are closely associated and near to What I don't do, Does not work well, Secondary things, Not meaningful, Fails to pick up strength/weaknesses, We cannot have, Uninteresting and No emphasis. In group 5 the elements Academic Focus and Parent Involvement are near to Limits opportunities, Very difficult for young children, Very formal, Little or no participation Prepares for formal school. In group 6 the element Teacher Directed is associated with this group and is near to Teacher sets pace/tone, Child does not enjoy, Teacher in control, Teacher is prime. Construct Teacher chooses is relatively important Mertie’s construing of the elements.
<table>
<thead>
<tr>
<th>Children chose</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brings out Individual</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Shows child's likes</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Uses child's initiative</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Teacher directly involved</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Uses the children's experiences</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Children involved</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structured</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Formal</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Concrete</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Real Life Objects</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Abstract Material</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Whole Groups</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Small Groups</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Individually</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Parent Involvement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Free Choice</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Informal</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Child Centred</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Separate Subject</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Academic Focus</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Integrated Approach</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Teacher Directed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Child initiated</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
</tbody>
</table>
Grid 11: Sheila’s principal components analysis of supplied elements rated on elicited constructs

The repertory grid shows ten constructs elicited from Sheila, a primary trained teacher in the 40-49 age group who had been teaching for over twenty years. Sheila completed a one-year diploma course in ECE and at the time of the study was teaching the 3-4 year olds at a rural primary school.

The principal components analysis reveal the groupings between the constructs and elements. The first two components account for 80.64% of the variance and the third component accounts for a further 6.33%. The association in group 2 shows the elements Small Groups, Free Choice, Concrete, Child Initiated, Child Centred, Informal, Individually were near to constructs Fits into early childhood teaching, Uses child’s initiative, Children involved, Brings out individual, Children chose. In group 3 the element Real Life Objects is near to
Free choice. In group 4 the elements Integrated Approach and Separate Subjects are near to Teacher directly involved, Shows what a child hates, Choose a topic randomly.

In group 5 the elements Academic Focus, Abstract Material, Teacher Directed, Whole Group and Parent Involvement are closely associated with Uncertain, Would not belong, Abstract/Talking about and Telling them what to do. In group six the element Formal is close to Rigid/Formal and Teach one subject. Given the closeness of the elements Parent Involvement, Structured and Concrete to the centre they seem relatively unimportant in Sheila’s construing of the practices.
Wendy’s repertory grid and principal components analysis

| Construct          | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| children choose    | 1  | 1  | 3  | 4  | 5  | 3  | 1  | 1  | 1  | 0  | 1  | 3  | 4  | 0  | 0  | 1  | 5  | 4  |
| child is free      | 2  | 1  | 4  | 3  | 4  | 3  | 1  | 1  | 1  | 1  | 1  | 2  | 4  | 5  | 1  | 1  | 4  | 2  |
| children are doing | 3  | 1  | 4  | 3  | 4  | 2  | 1  | 1  | 1  | 0  | 1  | 2  | 4  | 5  | 1  | 1  | 4  | 3  |
| practical things   | 4  | 1  | 2  | 2  | 3  | 1  | 1  | 1  | 1  | 0  | 1  | 2  | 3  | 1  | 1  | 1  | 3  | 3  |
| school’s curriculum| 5  | 4  | 1  | 3  | 1  | 2  | 5  | 5  | 0  | 2  | 4  | 2  | 2  | 4  | 4  | 4  | 1  | 1  |
| more structured    | 6  | 4  | 1  | 2  | 2  | 3  | 5  | 5  | 5  | 5  | 5  | 4  | 2  | 2  | 2  | 4  | 1  | 1  |
| flexible           | 7  | 1  | 3  | 3  | 3  | 2  | 1  | 1  | 1  | 1  | 1  | 1  | 3  | 4  | 1  | 1  | 4  | 3  |
| how you teach      | 8  | 4  | 1  | 3  | 2  | 2  | 3  | 3  | 3  | 0  | 2  | 2  | 2  | 0  | 1  | 1  | 1  | 2  |
| more formal        | 9  | 5  | 1  | 2  | 3  | 4  | 5  | 5  | 5  | 5  | 5  | 4  | 2  | 1  | 4  | 4  | 1  | 1  |
| used for explaining| 10 | 3  | 1  | 2  | 1  | 3  | 2  | 5  | 4  | 3  | 1  | 1  | 2  | 2  | 1  | 1  | 3  | 3  |
| times when used    | 11 | 3  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
| children understand| 12 | 1  | 3  | 2  | 2  | 1  | 1  | 1  | 1  | 1  | 1  | 2  | 4  | 1  | 1  | 3  | 3  | 2  |
| learning takes place| 13 | 1  | 2  | 2  | 2  | 1  | 1  | 1  | 1  | 1  | 1  | 2  | 3  | 1  | 1  | 2  | 2  | 1  |
| very important     | 14 | 1  | 2  | 3  | 2  | 2  | 1  | 1  | 1  | 1  | 1  | 2  | 4  | 1  | 1  | 4  | 3  | 3  |
| good to have       | 15 | 1  | 1  | 2  | 3  | 2  | 1  | 1  | 1  | 1  | 1  | 2  | 3  | 1  | 1  | 2  | 3  | 3  |
| very crucial       | 16 | 1  | 1  | 2  | 2  | 2  | 1  | 1  | 1  | 1  | 1  | 3  | 3  | 1  | 1  | 3  | 3  | 2  |
| motivates          | 17 | 1  | 2  | 2  | 2  | 2  | 1  | 1  | 1  | 1  | 1  | 3  | 4  | 1  | 1  | 3  | 3  | 2  |
| comes from within child | 18 | 1  | 2  | 2  | 2  | 2  | 1  | 1  | 1  | 1  | 1  | 2  | 3  | 1  | 1  | 3  | 3  | 3  |
| listens to teacher | 19 | 1  | 2  | 2  | 2  | 2  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 2  | 3  | 1  | 1  | 3  |
| have               | 20 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |

Grid 12: Wendy’s repertory grid showing the ratings of the supplied elements on elicited constructs
Map 12: Wendy’s principal components analysis of supplied elements rated on elicited constructs

Twenty constructs were elicited from Wendy, a primary trained teacher in the 40-49 age group. Wendy was teaching for less than twenty years and completed a one-week workshop in ECE. At the time of the study was teaching the 3-4 year olds at a city/urban primary school.

Principal components analysis shows the groupings between the elements and constructs. The first two components account for 78.11% of the variance and the third component accounts for a further 8.39%. The principal component map indicates that in group 1 the elements *Informal, Free Choice, Child Centred and Small Groups* are closely associated and near to the constructs *Not used for explaining, Practical things, Children understand, Less formal, Children are doing, Child is free, Important, Good to have, Children choose, Free choice,*
Flexible, Very important, Learning takes place and Times when not used.

Elements Concrete, Real Life Objects, Individually are closely associated and near to constructs Good to have, Comes from within the child, Children are doing, Very important and Very crucial. Element Parent Involvement is near to Children choose. The element Abstract Material and constructs Free choice, How you do not teach, Teacher chooses, How you teach and School curriculum seemed important in Wendy’s construing.

In group 3 the elements Formal, Integrated Approach, Whole Groups, Academic Focus, Separate Subjects and Structured are associated with Rigid, More structured, Unimportant, Taught to the child, Teacher is doing, Pays no attention, Not necessary, More formal, Child is told what do, No learning takes place and Times when used. Element Teacher Directed is associated with constructs Children do not understand, Abstract, Does not motivate.
<table>
<thead>
<tr>
<th>Structured teaching</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can be used</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Activities centred around child</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More convenient to have</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Child decides</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Has it place</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Suits the 3-4s</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Helps with enjoyment</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Maureen's repertory grid and principal components analysis

Grid 13: Maureen's repertory grid showing the ratings of the supplied elements on elicited constructs

- 1 Informal teaching
- 2 Child Initiated
- 3 Cannot be used
- 4 Centred on real life
- 5 What I don't do
- 6 Inconvenient to have
- 7 Teacher decides
- 8 Out of place
- 9 Should not be used often
- 10 Creates boredom

Structured
Formal
Concrete
Real Life Objects
Abstract Material
Whole Groups
Small Groups
Individually
Parent Involvement
Free Choice
Informal
Child Centred
Academic Focus
Separate Subject
Integrated Approach
Teacher Directed
Child Initiated
Map 13: Maureen’s principal components analysis of supplied elements rated on elicited construct

The repertory grid shows ten constructs elicited from Maureen, a primary trained teacher in the 30-39 age group who was teaching for just less than twenty years. Maureen had no formal training in ECE and at the time of the study was teaching the 3-4 age group at one of the rural primary schools.

Her principal components analysis shows the groupings between the constructs and the elements. Her first two components account for 68% of the variance and the third a further 11% of the variance. Some obvious groupings include group 1 where Abstract Material, Real Life Objects, Whole Group are close to Creates boredom, Cannot be used, Centres on real life, Should not be used often.
In group 2 the elements Structured, Formal, Separate Subject are near to Teacher decides, Structured teaching. In group 3 the elements Academic Focus, Integrated Approach, Small Groups, Teacher Directed, Concrete are associated with More convenient to have, What I do.

In group 4 the elements Parent Involvement, Individually are near to What I don’t do, Inconvenient to have. In group 5 the elements Informal, Child Initiated, Free Choice are close to Informal teaching, Child decides, Child initiated. In group 6 the element Child Centred is near to Suits the 3-4s, Activities centred around child, Can be used, Helps with enjoyment. The constructs Has its place, Out of place are very important in Maureen’s construing of the elements and the constructs.
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old time method</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Should have</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Before early childhood course</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Introduces concepts when child ready</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Like part to have part</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Make time for</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Has improved</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>I love to teach</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Easy to comprehend</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Sometimes need to use</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Identifies child's difficulties</td>
<td>11</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>More effective</td>
<td>12</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Easier to do</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>In child's interest</td>
<td>14</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>I like</td>
<td>15</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Children learn quicker</td>
<td>16</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Free but structured</td>
<td>17</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

1. Child centred method
2. Cannot have
3. After course
4. Forces down child's throat
5. Cannot get parents to understand
6. Don't have time for
7. Old time/stationary
8. I would not want to teach
9. Hard to grasp
10. Has no place in e.c.ed
11. Does not identify difficulty
12. Less effective
13. More difficult
14. In schemebook's interest
15. Dislike
16. Children do not
17. Children do as they like

Structured
Formal
Concrete
Real Life Objects
Abstract Material
Whole Groups
Small Groups
Individually
Parent Involvement
Free Choice
Child Centred
Academic Focus
Separate Subject
Integrated Approach
Teacher Directed
Child Initiated
Map 14: Ruby’s principal components analysis of supplied elements rated on elicited constructs

Grid Figure 14 shows seventeen constructs elicited from Ruby, a primary trained teacher in the 40-49 age group. Ruby had over 20 years teaching experience and had completed a one-year certificate course in ECE at the local teacher’s college. At the time of the study she was teaching a mixed group of 3-5 year olds at one of the rural primary schools.

Ruby’s principal components analysis shows groupings of constructs and the elements. The first two components account for 83.59% and the third component accounts for a further 4.70%. The principal component map shows two main groupings. The group 1 shows a close clustering of the constructs and elements. Element Teacher Directed is close to In the child’s interest, Identifies, child’s difficulties. Elements Individually, Concrete, Informal, Parent Involvement, Integrated Approach, Structured, Real Life Objects, Small Groups,
Free Choice, Child Initiated are closely related and near to Sometimes need to use, Should have, I like, Easier to do, Identifies Child's difficulties, Easy to comprehend, Children learn quicker, More effective, Has improved, More effective, Has improved, In child's interest, Free but structured, After the early childhood course, I love to teach, Introduces concepts when child ready, Make time for and Child centred method.

In group 2 the elements, Whole Groups, Separate Subjects, Abstract Material are construed as Don't have time for, Forces down child's throat, I would not want to teach, Before early childhood course. Elements Academic Focus and Formal are associated with Less effective, Cannot have, Does not identify difficulty, Children do not, Cannot have, Old time method, Children do as they like, Old time/stationary, Hard to grasp, In the scheme book's interest. Dislike, Has no place in early childhood education and More difficult. The constructs Like parents to have part and Cannot get parents to understand seem important in Ruby's construing of the practices.
Carmen's repertory grid and principal components analysis

Grid 15: Carmen's repertory grid showing the ratings of the supplied elements on elicited constructs
Map 15: Carmen’s principal components analysis of supplied elements rated on elicited constructs

Grid 15 shows thirteen constructs elicited from Carmen, a primary trained teacher in the 40-49 age group. Carmen, a teacher for over twenty years, had no formal training in ECE. At the time of the study she was teaching the 4-5 age group at one of the city primary schools.

The principal component map shows six distinct clusters. The percentage variance for the first two components in the principal component map is 62.7% and the third component accounts for a further 9.32%. In group 1 the elements Concrete, Individually are associated with Children enjoy, More manageable,
Broadens scope, Given time for, Has lasting impression. In that group Integrated Approach, Child Centred, Real Life Objects are near to This will come in.

In group 2 the elements Informal, Free Choice, Child Initiated are near to Shouldn’t have problems, Can have, Quite interesting, Children involved, As long as there is space/material, Provides opportunities.

In group 3 the constructs Limited experiences, Inadequate space/materials, everything from the teacher are closely associated to each other. The element Structured, Formal, Parent Involvement, Teacher Directed, Whole Groups, Abstract Materials, Whole Groups, Separate Subjects are associated with Disinteresting, Don’t have, Create problems, Not applicable, Restricted, Makes no impact, Limited, Chaos, Bored/Disruptive.

In group 4 there seems to be a close association between element Academic Focus and construct Dislike. Constructs I like, Dislike and element Small Groups are important in Carmen’s construct system.
Audrey's repertory grid and principal components analysis

| Grid 16: Audrey's repertory grid showing the ratings of the supplied elements on elicited constructs |
Map 16: Audrey’s principal components analysis of supplied elements rated on elicited constructs

The repertory grid shows twenty-four constructs elicited from Audrey, a primary trained teacher in the 30-39 age group, also had BA degree, which focused in part on education. Audrey had been teaching for just less that twenty years and had also completed a one-year certificate course in ECE. At the time of the study she was teaching the 3-4 age group at one of the rural primary school.

Her principal component analysis shows the groupings of the elements and the constructs. The percentage variance for the first two components in the principal component map is 95% and the third component accounts for a further 0.32%. The principal component map shows two distinct groups, with a very
close association among the elements and constructs in each group. In group 1 the elements Concrete, Free Choice, Child Centred, Integrated Approach, Informal, Individually, Child Initiated, Teacher Directed, Structured, Small Groups, Real Life Objects and Parent Involvement are closely associated with Provides a sense of fulfillment, Provides one to one contact, Focuses on the child's likes, Helps with language development, Develops the whole child, Develops required skills, Focuses on individual child, Caters to the needs of child, Links home and school, Often used, Should be a place for, Children learn to make choices, Provides a child centred curriculum, Provides social development, Relates to real life, Need a lot of this, Appropriate, Allows child contribution, Child gains skills and knowledge, Relaxes the child, Shows how skills develop, Concepts taught through manipulation.

In group 2 the elements Abstract Material, Whole Groups, Separate Subject, Academic Focus and Formal are associated with Not used regularly, Certain skills not develop, Focuses on teacher performance, Not very much contact, Passive learner, Retard social development, Deprives knowledge and skills, Develops parts of the child, Planning difficult, Dependent on others,Suppresses emotions, Low self esteem, Teacher directed learning, Not necessary, Not appropriate, Unaware of slow development, Unnatural situation, Rote learning, Unimportant, Lacks home and school harmony and Retards language development. Constructs Makes planning easier and Planning difficult are important in her construing of the practices.
Brenda’s repertory grid and principal components analysis

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Grid 17: Brenda’s repertory grid showing the ratings of the supplied elements on elicited constructs
Map 17: Brenda's principal components analysis of supplied elements rated on elicited constructs

The repertory grid shows ten constructs elicited from Brenda, a primary trained teacher in the 30-39 age group. Brenda, who had been teaching for over ten years, completed a one-year certificate course in ECE and at the time of the study was teaching the 4-5 age group at one of the rural primary schools.

Her principal component map shows the groupings among the constructs and elements. The percentage variance for the first two components in the principal component map is 77% and the third component accounts for a further 7%.
In group 1 the elements *Integrated Approach, Small Groups, Concrete, Real Life Objects* are associated with constructs *Like this, I prefer, Children remember more, Better to have, Takes child into consideration, Should be implemented, Child’s interest is there*.

In group 2 the elements *Informal, Free Choice, Individually, Child Centred, Child Initiated* and the constructs *Plays part in teaching, Child not ready* are not highly loaded on any factors and seemed relatively unimportant in Brenda’s construct system.

In group 3 the elements *Whole Group and Separated Subjects* are near to *Interest not there and Little or no part*. The elements *Structured, Academic Focus, Formal* are close to *Does not consider child, Not really done, Very little is learnt and Use little of*. *Abstract Material* is close to *I do not prefer and Prefer not to use*.

Elements *Parent Involvement, Teacher Directed* and construct *Seldom use, I have to use* are also important in Brenda’s construct system.
### Grid 18: Doreen’s repertory grid showing the ratings of the supplied elements on elicited constructs

<table>
<thead>
<tr>
<th>Child finds out</th>
<th>Easy for teaching</th>
<th>Done most of the time</th>
<th>Not always possible</th>
<th>Inadequate</th>
<th>No attention to individuals</th>
<th>Harder for teacher</th>
<th>Cannot teach like this</th>
<th>Less meaningful</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1</th>
<th>Telling them</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>More complex</td>
</tr>
<tr>
<td>3</td>
<td>Not always possible</td>
</tr>
<tr>
<td>4</td>
<td>More adequate</td>
</tr>
<tr>
<td>5</td>
<td>Gets around to individuals</td>
</tr>
<tr>
<td>6</td>
<td>Helps teacher to plan</td>
</tr>
<tr>
<td>7</td>
<td>I like to teach</td>
</tr>
<tr>
<td>8</td>
<td>Depends on the child</td>
</tr>
<tr>
<td>9</td>
<td>Cannot work well</td>
</tr>
</tbody>
</table>

**Doreen’s repertory grid and principal components analysis**

- **Structured**
  - **Formal**
    - **Concrete**
      - **Real Life Objects**
    - **Abstract Material**
  - **Whole Groups**
    - **Small Groups**
      - **Individually**
    - **Parent Involvement**
      - **Free Choice**
    - **Informal**
      - **Child Centred**
    - **Academic Focus**
      - **Separate Subject**
    - **Integrated Approach**
      - **Teacher Directed**
    - **Child Initiated**
Map 18: Doreen’s principal components analysis of supplied elements rated on elicited constructs

The repertory grid shows nine constructs elicited from Brenda, a primary trained teacher in the 30-39 age group who had been teaching for less than twenty years. Doreen, who taught at one of the rural primary schools, completed a one-year certificate course in ECE and at the time of the study was teaching the 4-5 age group.

On her principal component map the first two components accounts for 77.84% of the variance and the third component another 7.81%. The relationships between the elements and the constructs show five groups of elements and
constructs. In group 1 the element Small Groups is near to Harder for the teacher, Child finds out and Less meaningful. In group 2 the elements Child Initiated, Teacher Directed, Informal, Child Centred, Free Choice, Formal, Integrated Approach, Concrete, Real Life Objects are closely related and associated with Easy for the teacher, Not always possible, Inadequate, Done most of the time and Cannot teach like this.

In group 3 the element Individually is closely associated with Help teacher to plan. In group 4 the element Separate Subjects is near to Depends on the child, Not always possible, More complex, More adequate and Gets around to individuals. In group 5 Abstract Material, Academic Focus, and Parent Involvement are close to Cannot work well, Telling them, I like to teach.

Element Whole Groups and construct No attention to individuals, seem relatively important in the Doreen's construct system. Those that are not highly loaded on any factor and seem relatively unimportant to Doreen include Structured, Child Initiated, Teacher Directed, Free Choice, Formal, and Informal. Not always possible was used as the pole of two constructs indicating its permeability in her construct system.
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Love</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Encourage learning</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Move towards ideal</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Have</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Do</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Want</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Helpful</td>
<td>7</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Child initiated</td>
<td>8</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Creative</td>
<td>9</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Expression</td>
<td>10</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Taught</td>
<td>11</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Deleted or taken out</td>
<td>12</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Done in an integrated way</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Used</td>
<td>14</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Must be done</td>
<td>15</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Number of Heads</td>
<td>16</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1 Do not love a whole lot
2 Discourage
3 Move away
4 Restricting
5 Do not have
6 Do not do
7 Do not want
8 Not helpful
9 Teacher initiated
10 Stunts creativity
11 No freedom of expression
12 Included
13 Not taught
14 Separated
15 Not used
16 Must not be done

- Structured
- Formal
- Concrete
- Real Life Objects
- Abstract Material
- Whole Groups
- Small Groups
- Individually
- Parent Involvement
- Free Choice
- Informal
- Child Centred
- Academic Focus
- Separate Subject
- Integrated Approach
- Teacher Directed
- Child Initiated

Gloria’s repertory grid and principal components analysis
The repertory grid shows sixteen constructs elicited from Gloria, a primary trained teacher in the 30-39 age group who had been teaching for just over twenty years. Gloria, who started teaching at eighteen, completed a one-year certificate course and a BS degree in Early Childhood Education at an overseas university. At the time of the study she was teaching the 3-5 age group in one of the rural primary schools.

The principal components analysis provides a picture of the groupings of elements and constructs. The percentage of variance for the first two components accounts for 80.92% of the variance and third component further 7.61%. The principal component map shows four groupings of the constructs and elements. In group 1 there is a near association of elements *Small Groups, Whole Groups, Real Life Objects, Concrete, Free Choice, Child Initiated, Free Choice, Child Centred,*
Parent Individually, Informal, Integrated Approach with constructs Creative, Must be done, Used, Have, Ideal, Move towards, Expression, Encourages learning. In group 2 the constructs Taught, Do, Want, Helpful, Done in an integrated way are closely associated and seemed important constructs in Gloria’s construct system.

In group 3 the element Formal is near to constructs Do not want, Not helpful, Do not do, Separated, Not taught. In group 4 the elements Academic Focus, Teacher Directed and Structured are associated with Included, Discourage, Teacher Initiated, No freedom of expression, Restricting, Do not have, Not used, Move away, Stunt creativity, Must not be done and Do not love a whole lot.

Abstract Material and Separate Subject seemed to be important elements in Gloria’s construing of the practices.