Teacher backgrounds, resources, facilities, personnel and time allocation: A survey of music education in metropolitan pre-primary schools

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TEACHER BACKGROUNDS, RESOURCES, FACILITIES, PERSONNEL AND
TIME ALLOCATION: A SURVEY OF MUSIC EDUCATION IN METROPOLITAN
PRE-PRIMARY SCHOOLS.

BY


A Thesis Submitted in Partial Fulfillment of the Requirements
for the Award of

Bachelor of Education with Honours
at the School of Education, Edith Cowan University

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USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
ABSTRACT

The pre-primary year of schooling, the first year of formal education for many children in Western Australia, has the potential to capitalize upon young children's rhythmic and auditory responsiveness and can provide a solid foundation upon which further musical understandings may be built. Music educators such as Kodaly and Orff have stressed the advantages of children's early exposure to music. (Lawrence, 1978, p. 108; Leak, 1985/86, p. 8).

The Western Australian music syllabus "Music in Schools K-3" (1980, p. 3) highlights the significance of music education in early childhood and warns that "to neglect music at this time may limit our children's ability to express themselves musically in later years." Thus it would appear advantageous for children to begin music education in their earliest years.

This study investigated the distribution and quality of resources and facilities for music education in pre-primary schools from the perspectives of the surveyed pre-primary teachers. Information gathered from the teachers interviewed could be valuable for educational planners in better resourcing current and projected pre-primary schools.

The personnel responsible for music education in the pre-

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1 In Western Australia, children attend pre-primary school in the year they turn five. Enrolment is optional at present.
primary schools were examined. Explanations were sought regarding the operation of music specialist services in the respective pre-primary schools. The amount of time allocated for music education and factors which limited children's access to music instruction were explored.

McMahon (1986a, p. 45) comments on the need for professionally trained personnel with knowledge of child development to initiate programmes in music for children. This study examines the musical backgrounds and professional preparation of pre-primary teachers interviewed for the purposes of this project.

Data for this study was collected using interviews with pre-primary teachers and those music specialists who operated in the pre-primary schools of 21 randomly selected government primary schools from five of the 14 educational regions in the Western Australian, Perth metropolitan area. Grouping procedures and frequency counts facilitated further analysis.

Young children can benefit from fulfilling musical experiences. They will have such experiences if capable teachers using quality musical equipment and facilities are available for children in pre-primary schools.
"I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text."

Signature.
Date. 17/3/12
I would like to extend my sincere gratitude to Associate Professor John Williamson, Chairperson of the Department of Music Education for his supervision, time and guidance throughout the entire compilation of this thesis.

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To my family - thanks and love. You have given me throughout my studies unending guidance and total support. This work is dedicated to you:

My parents - Vladimir and Kathleen,
My sisters - Oksana and Elizabeth,
My brother - Andrew.

I am truly indebted. Thanks.
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A lonely life 'twould be without music.
No gay sound, no tranquil melody,
No spirited carols bringing Christmas joy,
No soothing lullaby for a small, wee babe,
No haunting richness of a tenor's strong voice.
A life without such treasures -
A lonely life 'twould be.

What of the music of the light-hearted, gentle finches,
The welcome ringing of church bells echoing across a valley,
The wind's soft, child-like voice as it dances among bowing daisies and cornsticks,
The steady beating of rain on the leaves of staid, proud trees,
Or the pounding temor of wild horses as they flee from the inescapable, deafening thunder?
What of a life without their music?
But a lonely life 'twould be.

For all has been given from the Lord above,
To cheer a cheerless heart,
To comfort the small child,
To stir the ever-spirited soul,
To unite the human being.
Without these to be cherished and appreciated by all, from the youngest child to the wisest elder...
Ah, but a lonely life 'twould be.

By Anna-Therese Kania
© July 1990
CHAPTER I

Thesis Title:
Teacher Backgrounds, Resources, Facilities, Personnel and Time Allocation: A Survey of Music Education in Metropolitan Pre-Primary Schools.

INTRODUCTION

The teaching of music in pre-primary schools can be restricted if the quality and quantity of resources and the number of staff capable of instructing the subject are limited. An examination of the personnel and resources for music education in the pre-primary schools could provide valuable information of the musical backgrounds of those responsible for music instruction and the availability of such resources.

The importance of music in the education of young children should be realized by all who contribute to the education of children. Music educators have attempted to spread the message, one such educator claiming that "without music, man is incomplete" (cited in Callaway, 1976, p. 65). Such words quoted by Perron, may be a strong statement, but it is a statement by a man who has influenced music teaching methodology in many schools world-wide. Zoltan Kodaly's words echo the intentions of other major music theorists such as Orff, Jacques-Dalcroze and Suzuki whose work in the field of music education have contributed to bringing music into the reach of increased numbers of young children.
However, although the methodologies of those prominent educators have been utilized and adapted by school music teachers to form the basis for workable music curriculum documents, it is unfortunate that music education may not be receiving the status that Kodaly and Orff strove so enthusiastically to achieve.

During the 1960's English music educators noted the "lack of 'system' evident in the music scene of primary schools" and the way in which "music is much neglected in many primary classes" (Addison, 1976, p. 37; Lambert, 1976, p. 41). In 1981, educators in England continued to bring to attention the fact that music was considered an area of low priority. (Pearcey, 1981, p. 9).

The Australian Situation

Bartle (reviewed by Neal, 1968, p. 67) alerted teachers to the state of music education in Australian primary schools in the late 1960's. His findings revealed that "A few shining examples apart, the picture presented is sorry and depressing."

In 1985, attempts to highlight the opportunity for musical participation for young children were still occurring. Vickery (1985, p. 29) engaged in active promotion, endeavouring to rally the support of Western Australian Principals in "encouraging and facilitating the development of a strong programme in the arts." Buxton (1981, p. 73) stated that the Australian Society of Music Education (ASME) Conference (Tasmanian Chapter) "reaffirmed the belief that music should be given greater emphasis in the early
The pre-primary year of schooling is of great importance in the early acquisition of basic fundamental musical learnings. Distribution and quality of music educators and the availability of resources are major factors determining the extent to which young children receive music tuition in their first schooling experiences.

It would therefore seem that if inadequacies exist in staffing and resources, young children's exposure to music is severely limited. This suggests a need to investigate the provisions made for music education in the pre-primary year of schooling. The extent to which such resources are provided give some indication concerning potential achievement of the musical goals advocated by those leading music educators already mentioned.

Objectives:

An investigation of staffing and facilities available to children in the pre-primary year of schooling may be justified. The importance of music education in the early years of a child's life shall be discussed in the literature section. The need for adequate music facilities, resources and time allocation shall be mentioned.
This study investigated:

A. **Teacher Backgrounds/Preparation**
   * The musical backgrounds/preparation of pre-primary teachers.

B. **Resources and Facilities**
   * Availability of instruments in pre-primary schools.
   * Instrument usage in pre-primary schools.
   * Adequacy and condition of instruments and equipment from the perspectives of pre-primary teachers.
   * Adequacy of room space.

C. **Personnel**
   * The personnel responsible for music education in pre-primary schools.

D. **Time Allocation**
   * Time allocation for music education in pre-primary schools.
CHAPTER II

REVIEW OF LITERATURE

Significance of Early Childhood Music Education

The child's first years of schooling have been recognized by early childhood music educators as the most appropriate time to nurture in the child a musical consciousness which can assist in laying a solid foundation for the development of future musical learning. The Western Australian music syllabus "Music in Schools K-3" (1980, p. 3) mentions the importance of music education for young children. It asserts that:

The early childhood years are critical ones in the development of certain musical skills. To neglect music at this time may limit our children's ability to express themselves musically in later years.

Harris (1977, p. 5036) explores the benefits of musical auditory training of young children. She comments that "younger children are more responsive than older subjects." Forrai (cited in McMahon, 1986b, p. 162) put forth an argument stating that the "development of the sense of rhythm can be facilitated by regular stimuli of singing in the first few years of life."

McMahon (1986a, p. 45) comments on the benefits of music instruction for the young child. The advantages cited include: discrimination of musical differences; development of expressive qualities; improvisation skills; improved co-ordination; enjoyment and communication effectiveness. Jalongo and Collins (1985, p. 18) emphasize that "children from infancy through age
five reach many milestones in their musical development."

Kodaly was also aware of the significance of musical exposure in the early formative years and consequently stressed that music education must start as soon as possible. (Lawrence, 1978, p. 108; Leak, 1985/86, p. 11). His view was echoed by those at an ASME Conference (Tasmanian Chapter) who listed recommendations for music education in Australian schools which included the statement that "music within the Arts be given special priority for young children in all educational systems" (Buxton, 1981, p. 173). The report further emphasized the need for greater awareness of the importance of music in the core curriculum. An investigation into the extent to which music education in pre-primary schools is undertaken might indicate the degree to which such a goal has been achieved in 1990 in Perth pre-primary schools.

The early years of a child’s life are again noted to be of significance in music education through the words of Hoermann (1981, p. 7), who asserts "it is necessary for our teachers to build the musical foundations in the first year of formal schooling, known as kindergarten." The pre-primary, usually the first year of formal schooling for many children in Western Australia, may then be considered valuable in providing many regular opportunities for music to be experienced, thereby affording as Hoermann states (1979, p. 1) "a basis for the educated life and mind...enriching the quality of life."

Other sources were utilized by the writer to acquire additional research information for the review of literature.
Letters were mailed to Canada, the United Kingdom and the Australian states of Queensland and New South Wales. Unfortunately, responses to the writer's requests were poor. Indeed the only person who replied and therefore assisted the research was Ms Olive McMahon of Queensland. In addition to external sources being tried, the ERIC CD-ROM proved an ideal means of collating information for the purposes of this project.

Teacher Backgrounds/Preparation

McMahon (1986a, p. 45) suggests that "early music education should be based on a sound knowledge of child development." The teacher education qualifications held by teachers operating in pre-primary schools included in this study shall be presented and discussed in addition to the musical backgrounds of pre-primary teachers.

Hoermann (1988, p. 7) refers to "the fact that many of them [pre-primary teachers] lack musical skills." Although her discussion does not specifically comment on the musical knowledge of early childhood teachers, her statement may have implications for the backgrounds of pre-primary teachers. Constable (cited in Bourne, 1988, p. 87) stresses that there exists "a lack of proper music teaching in our infants' and primary schools" and that a "national awareness and urgency of action is imperative" (Smart, cited in Bourne, p. 63).

In a short discussion with Mr Clive Nicholls (then a Ministry Education Officer, 6th April, 1990), he indicated that there
appeared to be little documentation available concerning the backgrounds of teaching staff in pre-primary schools. This project has gathered information on the musical training of pre-primary teachers - private instrumental/vocal studies and the musical knowledge gained during their undergraduate studies. The adequacies of their studies were also examined. In addition, reasons contributing to possible inadequacies have been further investigated.

Bonham (cited in Bourne, 1988, p. 63) outlined the "inadequacy of music in early childhood and primary teacher education." Undergraduate courses which do not provide pre-service teachers with essential skills to enable them to knowledgeably engage children in regular and sequential musical experiences, and which also provide inadequate time in the three year course to allow such aims to be realized, serve to disadvantage young children in schools. As Bridges (1980, p. 34) highlights:

How is it possible to prepare teachers adequately for this task (teaching music) when so little time can be allotted to music in the total pre-service teacher education programmes?

Gill (1985, p. 24) outlines a potential solution for perceived tertiary music education inadequacies when he comments that "more time needs to be spent in training institutions on music itself." If teachers are able to participate in music education studies at the early childhood level which give them the time to develop a musical background which can provide them with the expertise onto which confident musical interactions
with young children can be built, then the concern for the lack of musical training and skill development of teacher graduates would perhaps not be as grave as recent literature shows. As Harle's paper (1990, p. 26) reports:

Many people involved in the training of teachers to work with music in the early childhood field are faced with a situation which is far from ideal. Often they are allocated only minimal hours to work with the teacher...often the students have little confidence or expertise in music.

The fact that in early childhood education "it is the classroom teacher who must take the day to day responsibility for music" indicates that the teachers being prepared need to acquire special skills for the beneficial implementation of music programmes for their young children. (Bridges, 1980, p. 34). The musical qualifications/backgrounds of the surveyed teachers and their corresponding perceptions of the adequacy of music education units taken as part of their undergraduate courses shall be covered in this section. Additional information concerning the musical backgrounds of teachers which highlights their instrumental studies, vocal training and utilization of instruments for music instruction also shall be discussed.

Resources and Facilities

Bartle in 1968 provides an account of music education in Australian schools. He comments on resources and facilities afforded to students. Neal (1968, p. 67) in his review of the book, provides an illustration and states that there exists: "insufficient teachers, inadequate equipment and conditions."
McMahon (1986a, p. 43) discusses resources for music and early education. She remarks that "the schools themselves have been criticized for their limited resources - teaching facilities, music and instruments." The situation could have implications for pre-primary schools in which provision of adequate resources could be questionable.

The distribution and quality of facilities are factors influencing the nature of musical experiences of students. If resources are limited, then the desired development in children of musical concepts could be limited. An investigation of existing facilities in the selected pre-primary schools could provide information for planners in better equipping current and planned pre-primary schools. Miller (1974, p. 2) notes that:

Guidance in music activities rests primarily with the regular teacher who frequently possesses a natural love for the art, but often lacks formal training. Knowing and having access to quality equipment and materials however, can ameliorate this deficiency to a significant extent.

Some music educators in England commented upon the limited resources for music whereby "primary schools are having to share out an inadequate supply between all their classes...crying out for a few tuned instruments" (Addison, 1976, p. 39). Cuts of financial resources for music was also mentioned. (Pearcey, 1981, p. 9). An American study by De Laine (1987, p. 28) into the status of music education in the public schools of Maryland in 1983-84 concluded that "Music and equipment varied in availability and adequacy...additional funding was needed for programme effectiveness." It is to be hoped that the situation
in Perth pre-primary schools will be an improvement on the state of music education in those countries.

Music education has the potential to foster social interaction, improvisatory music-making, creative production, problem-solving abilities, exploration and physical co-ordination. (Burkart, 1980, p. 26). The degree to which a child may reach such goals could be restricted if equipment offering stimulating opportunities for discovery, group and individual tasks, instrumental improvisations, skill development, accomplishment and musical interest, are non-existent or severely lacking in quantity and quality.

Resources such as a selection of Orff-type instruments are important in the pre-primary school as a means of encouraging free and creative expression and instrumental improvisation by young children. Such instruments are of particular relevance to children in their early years. Through the use of the instruments, children are encouraged to "explore sounds, invent rhythmic or melodic fragments, use them to create accompaniment figures...to learn to play from memory" (Comte, 1982, p. 36). Such resources, syllabi materials, listening materials, adequate space for implementation of music lessons, electronic equipment, music corners, reference books and visual materials are all resources which can assist in catering for the needs of music education in the pre-primary and primary school years.

Ban (1981, p. 62) describes the hierarchical progression of introducing musical instruments to children as they mature in
their musical understandings. She states that:

Instruments are used from the earliest stages by all teachers who adhere to the Kodaly principles. Children learn to handle a variety of simple rhythm instruments, graduate to melody making percussion and later learn to play simple woodwind instruments which lead to the study of more complex instruments.

For children to successfully participate in such advancements, they must first receive opportunities to partake in auditory discrimination experiences and be allowed to explore instruments and the sounds they produce. (McMahon, 1986a, p. 45). This again highlights the importance of satisfactory provision of music resources in the early stages of a child's schooling - that stage being of course the pre-primary year.

Salaman (1982, p. 125) refers to the skill of improvisation as being "the most important element in music education... undoubtedly trains the ear to listen with discrimination." During informal interactions incorporating a range of activities with both tuned and non-tuned instruments, the child may be given the opportunity to develop improvisatory techniques which can "lead to spontaneous, personal, musical experiences" (Orff, cited in Lawrence, 1978, p. 133).

Kenney (1989, pp. 33-34) discusses the role and organization of music corners/centres in the early musical experiences of children. She remarks that "they create an environment where children are free to make choices...explore independently... pursue his or her own musical interests." Spontaneous,
uninhibited, active instrumental music-making and improvisation could be restricted in a child's early school life if informal opportunities are not presented to allow such experiences. Regular formal musical experiences coupled with informal individual or small group music-making opportunities encouraged by the presence of a potentially versatile music corner can grant the availability of tuned and non-tuned instruments to all students in what are ideally expected to be relaxed learning situations. Accessibility to the instruments may then occur.

The availability of sufficient room space for music and movement activities to be undertaken shall be investigated. Rooms where whole class groups can comfortably partake in movement sessions simultaneously may enhance the development of confident student expression in which the child can "depict and interpret not only the music's rhythm but its other elements, too" (Hughes, 1987, p. 132). A description of an ideal music room is provided in the paper "Music Framework Kindergarten - Grade 12" (1988, p. 67). Considering that the majority of music instruction undertaken in pre-primary schools occurs in the actual centres it is worthwhile taking into account desirable characteristics of music rooms such as: adequate space for whole group activities and the "use of carpet for floor covering [which] provides excellent acoustical effect and student comfort during movement activities" (1988, p. 67).

Pre-primary schools are used regularly for musical purposes and therefore would benefit by exhibiting
conditions which could enhance the transfer of musical knowledge. For creative dance/movement and music experiences to be executed without constant anxieties for child safety requires the availability of adequate room space.

The importance of movement activities was maintained by Jacques-Dalcroze when he described early rhythmic movement experiences to be the "fundamental, motivating force in all the arts" (cited in Landis and Carder, 1972, p. 7). That moving to music is a natural means of expression for young children asks that active participation in large and small group sessions be provided so that opportunities exist for children to engage in such a natural form of communication.

The "Music Framework Kindergarten - Grade 12" (1988, p. 67) points to more desirable circumstances in the discussion concerning the appropriateness of facilities to cater for elementary music programmes. It was emphasized that:

Facilities of adequate size and appropriate design are necessary to accommodate effective instruction in the essential elements of the elementary schools curriculum which includes activities of singing, listening and moving to music.

Although not solely a music room, the pre-primary school structure is required to support the extension of the musical knowledge of young children. Inadequate room size could hamper the provision of movement activity and "effective instruction."

It must be deemed necessary to ascertain the state of
music education in selected pre-primary schools as a means of contributing information which could prove useful in order to provide adequate personnel and facilities for music education for children in Perth pre-primary schools.

Personnel

The teachers responsible for music education in pre-primary schools shall be identified. Hoermann (cited in Callaway, 1974, p. 128) in assessing the role of the regular teacher in elementary music education programmes comments:

It may be the regular classroom teacher who is best able to bring a music programme to fruition and, in so doing, make a significant contribution to the development of a child's aesthetic consciousness.

Taylor (1987, p. 81) emphasizes the important role of general teachers in providing music education for their children. He states that "the classroom teacher is in the best position to exercise such 'pastoral' care as well as tend to the education of the whole child." In pre-primary education the emphasis centres on catering for the development of the whole child - the pastoral care aspect being of crucial significance. Taylor (1987, p. 81) gives further support for music education to be the responsibility of the general teacher when he mentions that the regular teacher "is able to integrate music education with all other learning experiences." The identification of personnel responsible for music education in pre-primary schools would allow the percentage of pre-primary teachers who organize and
present musical experiences to their children to be known.

In addition, other personnel who may contribute to the musical activities of pre-primary children such as teacher aides, parents, friends, community musicians and music specialists will permit the identification of other resource people to which the pre-primary may refer and utilize - the musical responsibilities thus being shared.

An outline of a paper by Hookey (1990, p. 102) reveals that music specialist consultation and coaching in elementary music education may have its benefits. It is mentioned that "the aim is to help classroom teachers...learn ways to develop their music programme."

In a discussion, Mary Jane Whitehead (W.A. Ministry of Education Consultant - Music Education, 18th May, 1990), focussed on the responsibilities of primary school music specialists, stating that specialists are employed to teach music to students from grades one to seven and automatic inclusion of pre-primary students does not occur. She later emphasized that if music specialists do not negotiate to include pre-primary students in their music responsibilities for the schools involved, the students could be excluded from receiving specialist tuition. The pre-primary year, the year in which young children can develop rapidly in their musical growth, could therefore be overlooked and the potential talents of music specialists not shared with young students in pre-primary schools.
Time Allocation

Lehmann (1986, p. 13) in his article "The Class of 2001" describes an ambitious aim stated by the Music Educators National Conference (MENC) National Executive Board concerning goals for the year 1990. It read: "By 1990, every student, K-12, shall have access to music instruction in school." Whether such an objective has in fact been attained in selected pre-primary schools in the Perth metropolitan area shall be investigated in this project. The extent to which this aim is achieved and the time granted for its instruction comprise additional points for investigation. Rimmer (1986, p. 8) outlined his list of suggestions for music education in Western Australia for 1990 and placed the need for a comprehensive K-12 curriculum to be of primary importance.

McMahon (1986a, p. 45) refers to the need to:

- ensure that young children have the time and opportunity to develop musical understanding through a process of discovery and invitation nurtured and guided by sensitive parents and teachers.

McMahon (1986a, p. 45) emphasizes that informal and formal sessions of musical learning be provided for students and that it should be a part of "integrated daily living." The Western Australian syllabus "Music in Schools K-3" (1980, p. 26) highlights that "many pre-primary teachers and children enjoy a regular 'music spot' every day." An investigation of the time allocation for music sessions in pre-primary schools would reveal the time provision for music education per week and show the
percentage of teachers who organize regular formal and informal musical experiences for their children.

The importance of preparing an informal musical environment was raised by Conte (cited in McMahon, 1986b, p. 162) when he states that children should be able to extend their repertoire of sounds in a "rich and responsive sensory environment." Thackray (1974, p. 29) elaborates further on the provision of varied situations for musical learning with young children. He comments:

a balance needs to be kept - a balance between discovery (informal) and teaching, between child centred and teacher directed (formal), between entertainment and instruction.

The importance of allowing regular informal musical experiences was reported by Holohan (1984, p. 1) in which he described the development of musical syntax in children aged five months to five years. Through his observations of 150 children in informal musical situations it was concluded that "children can learn a great deal through informal exposure to music and this exposure should begin before kindergarten."

Music corners/centres are able to provide the opportunity for children to engage in spontaneous, group/individual musical activity. Children can be presented with opportunities to interact with instruments - a knowledgeable teacher may guide and encourage exploration, creation and instrument interaction. If thoughtfully utilized, the music corner can extend experiences undertaken in formal situations, for example, rhythmic ostinati.
The extent to which formal and informal musical experiences are pursued by teachers and the time allotted to planned musical activity by teachers in pre-primary schools shall be ascertained and discussed. The need for daily musical interaction was mentioned by Bourne (cited in McMahon, 1988, p. 82) when he stated: "Why does not every kindergarten and primary school include music as a normal part of daily activity?" It is anticipated that pre-primary teachers will expand upon the musical organization operating in their centres.
CHAPTER III

METHOD

Subjects

The population for this study comprised pre-primary teachers and music specialists who operated in the selected pre-primary schools. The units of analyses were the pre-primary teachers who taught at the 21 randomly chosen government primary schools which catered for pre-primary students, and music specialists who shared their services with pre-primary students. It was acknowledged that not all pre-primary schools receive services of music specialists. Reasons for their absence from some centres shall be explored.

Research Instruments/Tools

The instruments developed for this study were two interview schedules designed to obtain information from pre-primary teachers and music specialists involved in the supervision of music programmes undertaken in the randomly selected schools.

The interview technique when used in research projects is considered an appropriate means of obtaining information on the current status of music in schools. It allows the interviewer to "follow up ideas, probe responses and investigate motives and feelings, which the questionnaire can never do" (Bell, 1987, p. 70). An interview can elicit specific information and
requires careful planning to be effective.

The interview schedule as an instrument allows the collection of data which may be used to organize plans to meet future needs or substantiate or refute the validity of a current practice. (Phelps, 1986, p. 188). When interviews are undertaken with much thought and care they are able to provide valuable data. The technique should not be viewed as the mere reporting of answers but as a means of obtaining more data and greater clarity. (Borg, 1981, p. 86).

Prior to piloting, the schedules were reviewed by experts in the field of music education and research and any recommendations were acted upon. The interview schedules were piloted on a small sample whereby the identification of any deficiencies or possible inappropriateness of questions were raised and alterations undertaken. Such a preliminary check allowed additional comments from teachers to be considered a fruitful means of further enhancing the quality of the schedules and in turn increase suitability and validity. The aim was to devise schedules which could encourage participants to co-operate and therefore respond readily to the questions, becoming willing contributors to the research.

The interview technique ensured that information was received from the chosen staff members in such a way that it was possible to obtain more detailed data which were later transcribed from the interview tape recordings. There did not exist the lack of reciprocity often associated with mailed questionnaires.
Clarification of misunderstood answers and the re-stating of questions were additional benefits of the interview technique. It allowed the interviewer to follow up on incomplete or confusing responses through the use of probing questions which aided clarification of the original responses. (Gay, 1981, p. 166). The use of the tape recorder to record responses assisted the collection of data and ensured all answers were noted. In addition, all teachers gave their permission for tape recorder use during the interviews. Teachers were offered the opportunity to listen to their tape recorded interviews to allow for the qualification of responses - thus increasing validity.

Design and Procedure

21 primary schools with pre-primary schools were randomly selected from five of the 14 educational regions in the Perth metropolitan area using the cluster sampling technique. A table of random numbers was employed. Approximate proportional representation of the pre-primary schools from the five randomly chosen regions was achieved.

- Bayswater = 5 schools (with pre-primary schools from the 22 in the region).
- Cockburn = 5 schools (with pre-primary schools from the 22 in the region).
- Joondalup = 5 schools (with pre-primary schools from the 21 in the region).
- Melville = 4 schools (with pre-primary schools from the 18 in the region).
- South Perth = 2 schools (with pre-primary schools from the 14 in the region).

The Principals and teachers of the participating schools
were approached to obtain their permission for the interviews to be conducted. Details were explained to avoid any confusion concerning expectations. The teachers involved in the study have not been identified either by name or school in this project. Results were analyzed and conclusions drawn on the basis of the data received.

Figure 1. Map of Educational Regions.

The design made use of pre-testing procedures whereby pre-primary teachers and music specialists from two schools (not those included in the 21 schools) therefore comprised a small sample of the intended population. Feedback from the teachers were studied and received recommendations were implemented where necessary.

Assumptions and Limitations

Inconvenience was incurred in the study with regard to the categorization of answers which allowed for opinionated, paragraph comments. Grouping of similar responses assisted the analysis.

Interviewing as a technique can present problems owing to subjectivity and the possibility of bias. Wiersma (1975, p. 138) highlights that pre-fabricated responses could be a disadvantage of the technique. Borg (cited in Bell, 1987, p. 73) comments on other disadvantages which may include the possibility of vague antagonism between the interviewer and the respondent. However, an organized interviewer who is aware of such a danger can reduce the likelihood of such factors affecting the outcome of results.

It must be remembered that the interview technique can provide valuable information which could not otherwise be collected using alternative methods. It ensures that information can be received from the interviewed teachers in such a way that "it is possible to obtain more detailed data...than be an impersonal questionnaire sent through the mail" (Phelps, 1986, p. 137).
Another factor could concern generalizability of results. Generalizability may be limited in this study as the sample size marginally fails to meet the criteria for generalizability mentioned by Gay (1981, p. 102) who recommends a 10% representative sample for descriptive studies. Logistical and time restraints did not allow a greater number of interviews to be conducted although generalizability was enhanced due to random selection of the regions and schools and the proportional representation of those primary schools with pre-primary schools from the regions. Nevertheless, findings from the study may be significant for other schools and suggest aspects requiring further investigation.

Data Analysis

The interview schedule included a scale which asked the participant to indicate his/her opinion concerning the validity of music education in early childhood education. Other questions required Yes/No responses. A frequency count of the responses showing the selections of the respondents was undertaken. This allowed the percentage of respondents who chose particular items to be known. The identification of factors related to the responses was explored.

Areas of the schedule asked for personal comments/short paragraph remarks and suggestions for future practices in music education (open-ended questions). Such responses were grouped according to similarity of responses and the percentage then listed. Where it was considered appropriate, statements from the teachers were also referred to during the report.
The number of music specialists in operation, the types of resources provided for music instruction in the pre-primary schools, the different musical backgrounds of teachers and the reasons supplied by teachers regarding any lack of formal/informal music instruction shall be presented in table form along with many other relevant percentage results.
CHAPTER IV

A. TEACHER BACKGROUNDS/PREPARATION

1.0. Musical Backgrounds/Preparation of Pre-Primary Teachers

Introduction

Miller (1974, p. 1) in his reference to preschool education in the United States argues that:

Music activities are an important part of the preschool experience, yet these activities are often guided by teachers who have had little musical training.

In some cases a teacher education course may be the only musical background a pre-service teacher gains other than his/her own music lessons whilst at school. For that reason it is important.

Correy (cited in Taylor, 1987, p. 13) alerts to "the fact that teacher education is often regarded as the pivot of educational systems." It can prepare teachers for the musical undertakings of early childhood education - demonstrate its value and provide prospective teachers with necessary skills to cater for the musical needs of young children. However, such aims can prove difficult to attain if time to participate in musical experiences at the undergraduate level is restricted.

It is not implied that teachers with extensive musical backgrounds will be "better" teachers. It is however being
emphasized that if the pre-service teacher is:

given time for personal development in music within teacher education programmes, it is possible for the non-specialist teacher who is convinced of the value of music education to use it effectively with young children. (Bridges, 1980, p. 34).

It is therefore important that the undergraduate programme provides the guidance and time for all facets of music education to be explored so that a teacher's confidence may be nurtured, his/her knowledge broadened and an appreciation of the value of music education in the lives of young children be developed. As McMahon (1988b, p. 79) argues:

My concern is that music be seen as an essential element of any curriculum and the earlier this is practised in any school/educational system the richer and more complex later achievement and the fewer the remedial needs.

The realization is therefore strengthened that music is a significant part of early childhood education and that its importance be shown by its regular inclusion in the timetables of schools and other educational systems in order to reduce the likelihood of a need for remedial provision. Teacher education institutions being the "pivot" of educational systems are therefore centres which can enhance the realization - of music being a worthwhile part of a teacher's education and thus of a child's education. McMahon (1988b, p. 79) continues to highlight the need for "preventive rather than remedial measures."
Reference to inservice attendance shall comprise another area for discussion which refers to remedial provisions available to teachers. Anderson (1981, p. 20) mentions the case of voluntary support of inservice by teachers because of "their [the teachers'] personal desire for professional improvement and to increase their teaching skills." The types of inservice activities attended and the lengths of such courses might indicate the teachers' concerns for their personal development.
Results and Discussion

Table 1 (overleaf) presents the personal dossier of each teacher and the specializations/major option areas they undertook during their undergraduate courses.

As can be noted, the most common age range was 26-30 years (6 - 28.6%). 13 teachers (61.9%) taught in pre-primary schools for periods ranging from five to ten years. 11 teachers (52.4%) mentioned that they had taught as teachers for the same period of time. (Two teachers had experienced teaching of other grades prior to working in pre-primary schools therefore their total teaching experience was greater than five to ten years). 15 teachers (71.4%) possessed Diploma of Teaching/Education/Bachelor of Arts (ECE) qualifications whilst six teachers (28.6%) held Teacher's Certificates.

During the interviews, question five on the schedule was altered to read: "What are your teaching qualifications?" rather than "What are your highest teaching qualifications?" All teachers therefore supplied lists which included their undergraduate studies which of course was desired in addition to any higher qualifications such as Bachelor of Education degrees.

Eight teachers (38%) gained qualifications from the Western Australian Institute of Technology (WAIT)/Curtin University of Technology followed by seven teachers (33.3%) from the Western Australian College of Advanced Education.
Table 1

Personal Dossiers of Pre-Primary Teachers

<table>
<thead>
<tr>
<th>Age Ranges</th>
<th>Pre-Primary Experience</th>
<th>Teaching Experience</th>
<th>Qualification</th>
<th>Institution</th>
<th>Specialization</th>
<th>Graduation Year</th>
</tr>
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<tr>
<td>51 - 55</td>
<td>16 - 20</td>
<td>21+</td>
<td>Tchr's Cert.</td>
<td>Claremont</td>
<td>Junior Primary</td>
<td>'59</td>
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<tr>
<td>51 - 55</td>
<td>11 - 15</td>
<td>11 - 15</td>
<td>Tchr's Cert.</td>
<td>WAIT</td>
<td>Social Studies</td>
<td>-</td>
</tr>
<tr>
<td>51 - 55</td>
<td>16 - 20</td>
<td>21+</td>
<td>Tchr's Cert.</td>
<td>Claremont</td>
<td>Junior Primary</td>
<td>'59</td>
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<tr>
<td>46 - 50</td>
<td>5 - 10</td>
<td>5 - 10</td>
<td>Dip. Ed. (ECE)</td>
<td>WACAE</td>
<td>Art</td>
<td>'81</td>
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<td>46 - 50</td>
<td>11 - 15</td>
<td>16 - 20</td>
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<td>Graylands</td>
<td>Junior Primary</td>
<td>-</td>
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<td>5 - 10</td>
<td>16 - 20</td>
<td>Tchr's Cert.</td>
<td>Graylands</td>
<td>Junior Primary</td>
<td>-</td>
</tr>
<tr>
<td>41 - 45</td>
<td>Less 5 yrs</td>
<td>Less 5 yrs</td>
<td>B.A. (ECE)</td>
<td>WACAE</td>
<td>Social Studies</td>
<td>'89</td>
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<tr>
<td>36 - 40</td>
<td>5 - 10</td>
<td>5 - 10</td>
<td>Dip. Tch (ECE)</td>
<td>Wellington NZ</td>
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<td>36 - 40</td>
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<td>5 - 10</td>
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<td>Early Chldhd</td>
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<td>Junior Prim.</td>
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<td>11 - 15</td>
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<td>Special Ed.</td>
<td>'81</td>
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<td>5 - 10</td>
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<td>'85</td>
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<td>5 - 10</td>
<td>Dip. Ed. (ECE)</td>
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<td>Music</td>
<td>'85</td>
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<td>26 - 30</td>
<td>5 - 10</td>
<td>5 - 10</td>
<td>Dip. Tch (ECE)</td>
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<td>5 - 10</td>
<td>5 - 10</td>
<td>Dip. Tch (ECE)</td>
<td>WACAE</td>
<td>Art</td>
<td>'84</td>
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<td>26 - 30</td>
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<td>5 - 10</td>
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<td>20 - 25</td>
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<td>5 - 10</td>
<td>Dip. Tch (ECE)</td>
<td>WACAE</td>
<td>Outdoor Pursuits</td>
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<td>5 - 10</td>
<td>5 - 10</td>
<td>Dip. Tch (ECE)</td>
<td>WACAE</td>
<td>Music</td>
<td>'85</td>
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<tr>
<td>20 - 25</td>
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<td>Less 5 yrs</td>
<td>B.A. (ECE)</td>
<td>Curtin Uni.</td>
<td>Psychology</td>
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<th>Age Ranges</th>
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<td>51 - 55</td>
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<tr>
<td>41 - 45</td>
<td>2 (9.5%)</td>
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<tr>
<td>36 - 40</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>31 - 35</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>26 - 30</td>
<td>6 (28.6%)</td>
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<tr>
<td>20 - 25</td>
<td>4 (19.0%)</td>
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<tr>
<td>11 - 15</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>5 - 10</td>
<td>11 (52.4%)</td>
</tr>
<tr>
<td>Less 5 yrs</td>
<td>3 (14.3%)</td>
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<tr>
<th>Institution</th>
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<td>WAIT/Curtin</td>
<td>8 (38.0%)</td>
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<td>WACAE</td>
<td>7 (33.3%)</td>
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<tr>
<td>Clnmt/Grylds</td>
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<tr>
<td>Wellington NZ</td>
<td>1 (4.8%)</td>
</tr>
</tbody>
</table>

<table>
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<th>Qualification</th>
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<td>6 (28.6%)</td>
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<tr>
<td>(B. Ed)</td>
<td>6 (28.6%)</td>
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<th>Specialization/Major Sequence</th>
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<td>Junior Primary</td>
<td>5 (23.8%)</td>
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<tr>
<td>Music</td>
<td>5 (23.8%)</td>
</tr>
<tr>
<td>Art</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Social Studies</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Psychology</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Early Chldhd</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Pre-Primary</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Outdr Pursuits</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Special Ed.</td>
<td>1 (4.8%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduation Year</th>
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<tbody>
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<td>'59</td>
<td>2 (9.5%)</td>
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<tr>
<td>'69</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>'71</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>'81</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>'83</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>'84</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>'85</td>
<td>6 (28.6%)</td>
</tr>
<tr>
<td>'87</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>'89</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Couldn't state</td>
<td>3 (14.3%)</td>
</tr>
</tbody>
</table>
(WACAE) - now Edith Cowan University) and five teachers (23.8%) from Graylands/Claremont Teachers Colleges (which later became part of WACAE).

With regard to teacher specializations/major option areas it was found that music education specializations were undertaken by five teachers (23.8%). Music tied with Junior Primary specializations/major option sequences completed mostly by primary school teachers who majored in the subject whilst at Graylands/Claremont. Art, Psychology, Social Sciences and Early Childhood Education were each completed by two teachers (9.5%). Six teachers finished their studies in 1985 although the range of graduation dates was spread over 30 years. The percentage of 23.8% for music education option sequences demonstrated that alongside Junior Primary studies, music education proved to be a somewhat favoured undertaking for pre-primary teachers. Four (19%) of the five (23.8%) teachers who completed music sequences were graduates from WAIT/Curtin University. The remaining teacher was from WACAE.

Table 2 (overleaf) shows the number of music education units completed by teachers.

As can be noted, all but two teachers mentioned they had completed at least one music education unit during their undergraduate studies. Two other teachers (one who studied at Claremont Teachers College, the other at Wellington Teachers College, New Zealand) stated that music was an integral part of their course - that it occurred throughout their training. Both
teachers could therefore not consider their music education in terms of units.

Table 2
Number of Music Education Units Completed by Teachers

<table>
<thead>
<tr>
<th>No. of Units</th>
<th>No. of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Unit</td>
<td>4 (19.0%)</td>
</tr>
<tr>
<td>2 Units</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>3 Units</td>
<td>5 (23.8%)</td>
</tr>
<tr>
<td>4 Units</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>5 Units</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>6 Units</td>
<td>4 (19.0%)</td>
</tr>
<tr>
<td>7 Units</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Throughout</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Couldn't State</td>
<td>2 (9.5%)</td>
</tr>
</tbody>
</table>

Five teachers (23.8%) revealed they had completed three units whilst studying—three units being the most common number completed by the teachers interviewed. Four teachers (19%) indicated they had passed six units of music and another four teachers stated that they passed one music unit in their undergraduate course. It was evident that numbers of units completed by the teachers ranged from one to seven. The teachers also indicated that at the undergraduate level they were able to develop further their musical backgrounds by participating in core music education units. Also they could gain additional musical knowledge from the completion of other optional music education units offered by their institutions. It would appear that the extent to which teachers may advance their musical
understandings depends on the numbers of units available to pre-service students and their ability to accommodate those units in their semester timetables. As one teacher elaborated:

"If I wanted to do a music major, I would have to go in to the institution four times a week. It's not that I wasn't interested but that I had a part-time job. I worked three days a week and I had to choose units that fit[ted] around my work. If I didn't work, I couldn't have gone there. I can't see why it had to be so time consuming. Perhaps if they had crammed it into two or three days I might have been able to do it ...because I wanted to do music."

In this particular case the teacher's desire to increase her musical knowledge was inconvenience by her employment. The teacher regretted her inability to undertake the studies but highlighted the awkwardness that surrounds maintaining part-time employment and accommodating difficult demands. It is unlikely that university timetable fixtures however much designed to ease the burden on students, can hope to suit all students.

Table 3
Undergraduate Music Activities

<table>
<thead>
<tr>
<th>Activities/Content</th>
<th>No. of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Songs/Games</td>
<td>21 (100%)</td>
</tr>
<tr>
<td>Theory/Notation</td>
<td>16 (76.2%)</td>
</tr>
<tr>
<td>Programming</td>
<td>16 (76.2%)</td>
</tr>
<tr>
<td>Percussion Ensemble</td>
<td>14 (66.6%)</td>
</tr>
<tr>
<td>Movement/Eurhythmics</td>
<td>14 (66.6%)</td>
</tr>
<tr>
<td>Recorder</td>
<td>14 (66.6%)</td>
</tr>
<tr>
<td>Solfa</td>
<td>9 (42.9%)</td>
</tr>
<tr>
<td>Choral</td>
<td>5 (23.8%)</td>
</tr>
<tr>
<td>Piano/Guitar/Instrumental</td>
<td>5 (23.8%)</td>
</tr>
</tbody>
</table>
Although wide differences were apparent in the explanations of music unit content of some teachers as opposed to others, consistent similarities were evident in the descriptions of some teachers especially those of recent graduates (mid and latter part of 1980's).

The content discussed by many of the teachers who graduated during the mid and latter part of the 1980's referred to the utilization of Orff percussion instruments, solfa and eurhythmic activities. Opportunities to pursue instrumental studies (piano, guitar) appeared to become more common from the mid 1980's. Consistent inclusions in the activities listed by fourteen teachers (66.6%) comprised percussion experiences and singing activities.

It was not unexpected that all teachers revealed they had participated in singing and song game sessions modelled by lecturers in their respective institutions. The emphasis on singing and musical games during undergraduate music education studies was commented upon by teacher graduates of 1959 through to 1989. A 1959 graduate from Claremont Teachers College with a major in junior primary studies referred to the music component of her course and stated:

"It gave you a good overall grounding in music. It centred on how to teach a song, how to organize singing games with the children...really common sense. We didn't only do music during music time but maths had musical activities in it and language - songs, rhymes."
The significant role of singing and associated games and actions continued to be espoused by a 1989 graduate student. She mentioned:

"We did work on how to take a music lesson. There was a choir which you could be involved in if you wanted to. But we actually had singing lessons and made up a resource file on different songs, activities."

The importance of singing games and action songs in early childhood education continued to be a major part of the music education component for teachers of young children although another graduate of 1989 stated that "Solfège, sightreading, movement and some ensemble work were other things we did quite a bit of." The range of experiences mentioned by teacher graduates suggested a certain broadness of musical activity which differed from the onus placed on unison singing and related games noticeable in the descriptions of musical content provided by the 1959 graduate.

16 teachers (76.2%) mentioned that they received tuition which concerned the theory of music during their undergraduate course. One teacher commented on the extent to which musical theory was pursued in her studies when she stated "We had to learn about notation, had tests. We had to pass the practical parts as well as the theory...rhythms." Another teacher added: "Notation was part of the course. We all made charts, beat charts and felt rhythmic pieces for our teaching."

Although a large percentage of teachers was knowledgeable of basic theoretical understandings so that young children
could be introduced to the written form of music, teachers were divided about its implementation in pre-primary schools. As one teacher explained: "I don't like to get them involved in it too much. I just want them to enjoy music." This situation contrasted with the methods employed by another:

"All my kids know ta, ti-ti and sa and they can echo clap quite well and copy them from the blackboard. We do games with them and they love it. I might do it with them once or twice a week."

It was obvious that even though the teachers were in possession of similar understandings the types of experiences planned for their children were dependent on other factors.

In the cases just mentioned it was the teachers' views of the appropriateness of certain musical activities which determined their application in the pre-primary schools. The relevance of such experiences for children were influenced by their considered suitability by the teachers concerned, one who felt that the inclusion of rhythmic notation would encroach upon the pleasures that could be gained from musical activity, the other whose belief it was for children's musical learnings to contain knowledge of basic notational forms. Similarity of musical background did not necessarily mean that techniques used to transfer musical understandings were uniformly employed by teachers.

Another 16 teachers (76.2%) revealed they had been informed on how to develop programmes for early childhood music education. Outlines of objectives, goals, sub-concepts and
developmental stages were included in the lists of teachers. The compilation of resource files were mentioned. They were commented on most favourably by those teachers who reported the value of undertaking such an exercise in view of the assistance it provided to those teachers upon receiving employment. The organization of a music file was described by a teacher:

"We had to make up a special file of simple range songs and it had to be coded so we had movement, playing, singing and so forth. Actually we learned a lot of songs in that course and we also referred a lot to books like the 'Children's Song Book.' Doing that file was helpful."

It was clear that teachers appreciated having prepared resource materials which could be immediately used during their first experiences as teachers in pre-primary schools/early childhood centres. They continued to refer and utilize the information and aids they constructed during tertiary studies to assist the development of musical experiences for their children throughout their careers. It appeared that the creation of music resource files and aids were a worthwhile undertaking for the teachers not only as a support for their initial teaching experiences but for their continued growth as early childhood music educators.

14 teachers (66.6%) referred to the use of percussion instruments and ensemble performances during their undergraduate music education. A teacher elaborated on the activities in which she was involved at the undergraduate level.
"We used percussion instruments and learned songs that could be taught in pre-primaries. We had to go out to one school and get the children to do a performance. We also had to get into groups, each with a percussion instrument and perform songs for an assignment. We recorded songs and played instruments."

The teacher revealed she had participated in different types of percussion activities however no teacher mentioned whether emphasis had been placed on the utilization of non-tuned versus tuned instruments. It is therefore not possible to establish any association between recommended usages of non-tuned or tuned percussion instrument practices undertaken in teacher education tertiary institutions and overall non-tuned/tuned instrument availability and use (to be covered in a later section).

Movement and music activities were also mentioned by 14 teachers (66.6%) to be part of the musical experiences they completed during their undergraduate courses. Eu rhythmic sessions were included in descriptions provided by teachers. Those teachers with Teacher's Certificates did not report/could not recall having participated in movement sessions whilst studying. This however does not suggest that the teachers were not involved in any form of movement experience.

Teachers indicated that it was difficult for them to provide in-depth descriptions of the content of their undergraduate musical experiences. Many were unable to remember every aspect of their course. This could be considered a limitation of the question although teacher explanations were
able to support the descriptions provided by other teachers who graduated from the same institution in the same year. For example, the content listed by the Claremont Teachers College 1959 graduate extended and gave weight to the musical experiences outlined by another teacher who completed her studies also at Claremont in 1959 with the same subject major (junior primary) as the first teacher. This procedure proved successful in that near identical content descriptions were evident from teachers who graduated from certain institutions in the same year.

The provisions of recorder tuition as a component of the music education units completed by teachers was mentioned by 14 teachers (66.6%). Three (14.3%) of the five teachers (23.8%) who possessed Teacher's Certificates revealed that study of the recorder was an important part of the musical activities undertaken.

Nine teachers (42.8%) specifically referred to the use of solfa by lecturers at tertiary institutions. Most teachers did not elaborate on the usage of solfa in the musical activities they presented to the students in their centres.

Choral participation was an interesting addition to the content lists described by teachers. Four of the five teachers (23.8%) who stated that they had had choral musical experiences, had attended WALT/Curtin University. The vocal training of teachers shall be discussed later.
Five teachers (23.8%) revealed that piano or guitar studies were other music education units they completed during their undergraduate courses. Four of the teachers (19%) reported they were required to undertake two instrumental units whilst the fifth teacher stated she had completed one piano unit for each semester of her course in addition to core music requirements.

The types of musical activities listed by teachers indicated that teachers had been exposed to a range of experiences designed to prepare them to organize and execute music sessions with their children. Although teachers participated in similar musical experiences in their core units there were cases in which teachers broadened their musical understandings by undertaking music option sequences. This would have provided those teachers with more advanced musical knowledge thus creating greater differences in the backgrounds and therefore the musical understandings of teachers. Musical background differences may be influenced by other factors such as the existing knowledge teachers possess upon entering an undergraduate course and the skills they may develop to continue their personal musical development after graduation. The instrument playing skills of teachers shall now be examined.

Performance

The following table (overleaf) reveals the instruments currently played by teachers and the usage of those instruments in the pre-primary schools of those teachers.
Table 4
Teachers Who Play Instruments

<table>
<thead>
<tr>
<th></th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able to play an instrument</td>
<td>10 (47.6%)</td>
</tr>
<tr>
<td>Unable to play an instrument</td>
<td>11 (52.4%)</td>
</tr>
</tbody>
</table>

As can be noted, ten teachers (47.6%) reported that they could play a musical instrument. 11 teachers (52.4%) stated they were unable to play an instrument. Of the ten teachers who could play an instrument, eight stated they played the piano or keyboard and four indicated they were able to play the guitar. The number of years of formal piano education undertaken ranged from three to 11 years. One teacher commented she had taught herself to play the organ/keyboard whilst two of the four teachers who played the guitar were self taught. Interesting additions to the list of musical instruments included the cello, violin and trombone played by a teacher who learned the instruments during her high school years, and the cornet which was played by a teacher who received four years of tuition.

Regarding instrument utilization in pre-primary music lessons, seven of the eight teachers able to play the piano/keyboard incorporated the instruments in the musical activities presented in the teachers' centres. Five of the seven teachers utilized the instruments on an infrequent basis (once a fortnight/
occasionally during the year). Two of the teachers used the instruments everyday and the teacher who did not include piano/keyboard accompaniment for pre-primary music sessions reported that the centre was not endowed with a piano/keyboard. The teacher possessed musical abilities yet did not have the necessary instrumental resources to share her abilities with her young students. The table below, provides information on instrument usage by teachers.

Table 5
Instruments and Usage by Teachers

<table>
<thead>
<tr>
<th>Instruments</th>
<th>No. of Teachers</th>
<th>Utilization</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piano/Keyboard</td>
<td>8 (38.0%)</td>
<td>5 (23.8%)</td>
<td>Occasionally</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 (9.5%)</td>
<td>Everyday</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 (4.8%)</td>
<td>Rarely/Never</td>
</tr>
<tr>
<td>Guitar</td>
<td>4 (19.0%)</td>
<td>2 (9.5%)</td>
<td>Once per Wk</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 (4.8%)</td>
<td>Everyday</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 (4.8%)</td>
<td>Rarely/Never</td>
</tr>
<tr>
<td>Cornet</td>
<td>1 (4.8%)</td>
<td>Rarely/Never</td>
<td>Rarely/Never</td>
</tr>
<tr>
<td>Cello</td>
<td>1 (4.8%)</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Violin</td>
<td>1 (4.8%)</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Trombone</td>
<td>1 (4.8%)</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

The use of the guitar during the musical experiences of children was mentioned by three of the four teachers who were able to play the instrument. One teacher stated she incorporated the guitar into the everyday musical activities at her pre-primary school whilst the two other teachers stated the instrument was
used in their centres once every week. The two teachers who between them were able to play the cello, violin, trombone and cornet revealed they rarely used the instruments if at all.

It was evident however that even though teachers owned instruments their utilization was not ensured. Three of the ten teachers able to play an instrument incorporated one of their instruments in the everyday musical experiences of children. In addition to the eight teachers with pianos/keyboards in their centres, another two teachers who also possessed the instruments did not utilize them as they stated they could play neither a piano nor keyboard. The teachers' backgrounds and initiatives were obviously factors which could have influenced the utilization of the instruments in the musical experiences presented to children. Perhaps if all teachers were familiar with basic musical theory there would not exist apprehensiveness to include for example, an electronic keyboard in the musical activities undertaken by those teachers.

As was outlined earlier, one of the eight teachers able to play the organ/keyboard used her initiative to teach herself to play the instruments with positive results. Perhaps usage of an instrument such as a portable keyboard by teachers could be increased in most cases if teachers took the initiative to further their understandings of musical theory either through self education or attendance at music seminars or workshops. Teacher support of music workshops shall be discussed later.

Table 6 gives the percentage scores of teachers who had
received formal vocal training.

Table 6
Formal Vocal Training of Teachers

<table>
<thead>
<tr>
<th>Training</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Training</td>
<td>4 (19.0%)</td>
</tr>
<tr>
<td>No Formal Training</td>
<td>17 (81.0%)</td>
</tr>
</tbody>
</table>

Four teachers (19%) acknowledged that vocal training was emphasized in the music major sequences they undertook. Choral studies for those teachers lasted for a duration of one year. 17 teachers (81%) commented that special vocal training was not an intense part of their courses although many of the teachers indicated that singing practise, learning songs and recognition of pitch intervals were included in the musical studies they completed.

One teacher who mentioned she did not feel confident in her ability to sing in tune employed the keyboard to sound the correct starting note and used the instrument as a device to maintain the singing of her children. The compensatory function the keyboard performed helped the teacher ensure that singing was still a part of her overall music programme even though she did not feel capable to lead the planned singing experiences in her centre.
Table 7 lists the reasons provided by teachers concerning their perceptions of music unit inadequacies.

Table 7

Reasons for Music Education Unit Inadequacy

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not relevant/Did not prepare for real situations</td>
<td>5 (23.8%)</td>
</tr>
<tr>
<td>Did not cater fully for students with non-musical backgrounds</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>Did not adequately provide for pre-primary music education specifically</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>A more practical element to be included</td>
<td>1 (4.8%)</td>
</tr>
</tbody>
</table>

Five teachers (23.8%) referred to the units they completed to have not been entirely relevant. One teacher explained:

"It didn't prepare me for the reality. I went up north and had an unruly bunch of kids...not just pre-primary but I also had to teach up to grade three. I would try to teach them solfa and all this - they took one look at me and thought 'No way.' So we ended up doing things like Johnny Farnham and things, adapted it and they really enjoyed it. My whole belief in education is that they should enjoy it."

The teachers expressed concerns that the reality of teaching was not imparted - that perhaps tertiary education distanced itself from actual practices found to be appropriate for early music education. The first teacher's comment suggested that more
information be provided about catering for the musical needs of children in circumstances differing from those usually encountered in metropolitan schooling systems and what may be expected in country institutions or in multi-ethnic, Aboriginal classrooms.

One teacher claimed that "I don't see how a course can make you an expert in everything. It can't be. You learn from teaching also." Taking into account this teacher's statement it could be that teachers expected too much from their courses. As another stated: "You come out of your course thinking 'I don't know anything.' But really you have a wealth of knowledge inside." In the previous cases however, the teachers were concerned that the content of what they had been taught did not match the realities of demanding teaching situations. This may have implications for future learning content covered in undergraduate music education units - greater emphasis on what may be expected of them in a musical capacity and the possible teaching situations which could be encountered. As Bridges (1980, p. 34) highlights:

Only when early childhood teacher education for music becomes more realistic and more relevant during their undergraduate studies will there be any hope of breaking the vicious circle which is limiting opportunities for children's aesthetic development.

Three teachers (14.3%) felt the music education units completed during their undergraduate studies inadequately prepared them because they did not cater fully for the students with non-musical backgrounds. The teachers elaborated on the difficulties they experienced:
"I still think that if you had gone into early childhood education with a musical background you were at a definite advantage. If you went in with limited musical knowledge you were at a disadvantage. I really had to struggle at the practical side. On the other hand, I also learned a lot because I will now go to our organ at home and just play it. I still think though, that if you went in with limited musical background you were at a definite disadvantage."

"I really had no musical background. I think the units should have been made easier for people if you didn't have a musical background. I found it very threatening in some cases."

These complaints were supported by teachers with musical backgrounds:

"The course was alright for me because I already had musical knowledge...but some of the girls were not so confident about music."

"The course was adequate for me because I had the musical knowledge. I had done music quite extensively. For the others it was a bit harder."

The teachers obviously agreed that their musical backgrounds assisted their progression through the courses whereas those with a lack of musical knowledge believed they were placed at a distinct disadvantage. One other teacher mentioned that "It would have been good if the units could have extended more those students who had already done music before."

This could indicate that different units specifically designed to cater for the musical needs of student teachers with varied backgrounds would allow teachers to further their musical
developments, although all teachers would of course have to learn particular teaching methodologies and programming techniques. Teachers complained that their music education units were either too difficult or not challenging enough.

Another three teachers (14.3%) commented that their courses did not adequately provide for pre-primary music education – that the primary component was too pronounced.

One teacher (4.8%) expressed her concern regarding the need for a more practical element to be included in undergraduate music education units. She stated: "For me, I would have rathered a little more practical rather than the theoretical because I'd been through the theory on the piano." Obviously the previous musical knowledge of the teacher influenced her desire to have received increased practical activity instead of the theory. This again highlighted the different needs of teachers caused by the varied musical backgrounds of student teachers upon entering their undergraduate courses.

Table 8 (overleaf) reveals teacher perceptions of the adequacy of the music education studies undertaken by teachers for preparing them to teach music in pre-primary schools.

Eight teachers (38%) responded positively to the question and declared that the music education units in which they were involved prepared them appropriately for their future musical undertakings as teachers. One teacher (4.8%) was undecided and 12
teachers (57.2%) believed their musical studies were inadequate as a preparation for teaching music in pre-primary schools. Those teachers who perceived their studies to be adequate explained reasons for their decisions.

Table 8

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gave knowledge on what is appropriate for young children</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>Gave teachers background/grounding</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Knowledge on integration</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Gave confidence</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Complemented existing knowledge</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Undecided</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td><strong>Margin of error</strong> .2%</td>
<td></td>
</tr>
</tbody>
</table>

As can be noted, three teachers (14.3%) indicated that the units they completed gave them knowledge of the types of musical experiences considered appropriate for young children. The teachers elaborated further:

"The music units I did gave me the ability to select songs that were suitable for the four/five year old child and how to present it to a class."
"I just think it gave you a good basic idea of what kids would be able to do - what they could do and what they couldn't. The lecturer gave you a really good idea of that. I've watched some people teaching and the material they've chosen is not appropriate... it's way too much over their heads or not challenging enough - either too high or too low. So the course did help you to choose the appropriate songs and materials."

This point was mentioned by a majority of the teachers who viewed their studies to be adequate.

Two teachers (9.5%) explained their musical studies were useful in that they provided them with the necessary background to cater for the musical needs of young children. The teachers commented:

"Because I didn't have any musical background before then, it gave me a good background to teach - otherwise I would have been in trouble."

"The units gave people who didn't have any musical knowledge at all a good grounding to start with. People need to understand what's behind music and then they can go from there."

That the units were able to supply them with a basic knowledge of musical theory appeared to be appreciated by the teachers. The importance of musical theory in undergraduate studies reaches greater heights in that the presence of pianos/electronic keyboards in some pre-primary schools asks that teachers have some knowledge of basic theoretical principles so that they may be used for the benefit of children in the centres.
One teacher referred to the fact that her musical studies gave her the confidence to pursue musical activity with young children. She mentioned that "It gave me the confidence to sing in public, use my voice and move with the children." The teacher obviously acquired valuable skills for the implementation of music sessions. Another teacher (4.8%) commented on the knowledge it provided her for the integration of music with other curriculum areas. She explained her view:

"The units I did allowed me to see just how much children can learn through music and how much it has to do with other areas. So much of children's learning revolves around music and movement...I mean you could teach just about everything in pre-primary through music and movement - skills, concepts, everything. It's gross motor movement, aural training - just about everything."

The potential of music education to permeate other subject areas and its ability to develop skills not solely of a musical nature were recognized by the teacher during her undergraduate studies. The remaining teacher (4.8%) felt her studies were adequate in that they complemented her existing musical knowledge:

"I found that the course was a bit easier for me because I already had some musical background. It acted as a revision as the course was very thorough and the content was good.

In this case the teacher valued the revision she received and commended the types of experiences undertaken and the way in which the units were presented."
An interesting request put forward by a recent graduate concerned the possible timetabling of additional core music education units. Although satisfied with the adequacy of music units she completed owing to her previous musical background the teacher reported that:

"There was some concern that we really needed to have done another unit in third year. Some of the other students were less confident about music. They didn't feel they had enough just in that first year unit. Also your thinking changes a lot towards the end of the third year and you look at something differently than when you were in first year. So they felt that perhaps it would have been good to have had another unit. Many of the students I spoke to said there was room for more music education in the course. I think they will probably put more in."

The graphs (overleaf) reveal the number of music education units allocated in the early childhood education courses at both Edith Cowan University and Curtin University of Technology. When viewing the graphs it must be remembered that each of the institutions offered additional music education units in the forms of music sequences, E-options and elective studies (for example, one elective unit is available in the third year of the Bachelor of Arts teacher education course at Edith Cowan University, 1991).

It was evident especially at Edith Cowan University that the overall numbers of core music education units offered during the early childhood undergraduate course decreased slowly between 1978 and 1991. At Edith Cowan University the numbers decreased from four units in 1978 to one unit in 1984 and remained the same through to 1991.
Number of Music Education Units at Edith Cowan University

![Bar Chart]

**Figure 2.** Number of Compulsory Music Education Units at Edith Cowan University.
Number of Music Education Units
at Curtin University of Technology

Figure 3. Number of Compulsory Music Education Units at Curtin University of Technology.
At Curtin University of Technology from 1978 to 1981 students were required to complete one music education core unit during semester four whilst in semester five it was optional to complete a music education unit. From 1982 to 1986 two music education units (one curriculum and instruction music unit and one movement unit) were included in the undergraduate early childhood course. In 1987 the situation changed - the curriculum and instruction unit remained and the movement unit was incorporated into an entirely new unit called "Movement, Physical and Health Education." The situation did not alter in 1991. It must be mentioned that overall time allocation for core music education units were of a longer duration at Edith Cowan University than those organized at Curtin University of Technology.

An interesting comparison could be drawn between the number of units assigned to core music education and those given for Language Arts subjects (Communication, Reading) at both institutions. The graph (overleaf) shows that at Edith Cowan University, language arts subjects consistently equalled or outnumbered music education units. In 1978 language and music education units each tallied four. In 1991 the situation differed greatly: language units comprised four; music education was assigned one unit.

At Curtin University of Technology from 1978 to 1982, two language units were contained in the undergraduate course compared to the one music core unit and the optional core music unit available to students in the fifth semester. From 1983 to
No. Music Ed./Language Arts Units at Edith Cowan University

Figure 4. Number of Music Education and Language Arts Units at Edith Cowan University.
Figure 5. Number of Music Education and Language Arts Units at Curtin University of Technology.
1986 three language units as opposed to two music education units were included in the course. From 1986 to 1991 one music education unit was again out-numbered by the language units.

Additional complaints about the lack of time allocated to music education in early childhood education at both tertiary institutions which offered the course were received from teachers as they responded to question 27 in the interview schedule. Teachers' comments included:

"One improvement I would like to see is that they upgrade the teaching courses for music. In one semester of music the students can not pick up enough information especially as they now tend to place more emphasis on theory. The students come out and it can be quite interesting their first few musical experiences. Most of the students that come out now know little practical."

"I feel at the moment that the teaching courses are thrashing maths and language. One of the teacher's at the school here said that what a lot of teachers are frightened of is teaching music. They don't always admit it but that's the case. Maybe they'd better look at the extent to which music is undertaken during their undergraduate studies then."

"I would like to see a bit more music education in the teaching courses. You can do music options but not many people did it when I was there. They tend to go for maths or science. Some kind of inclusions in the course that doesn't make it so threatening or encourages them to do it would be great."

"I would like to see more emphasis placed in the undergraduate course on early, early childhood music education. I would have appreciated having help
using music with the two/three age group. We have a lot of the three/four age group coming into the pre-primaries now and we need more on that."

"I think the courses centre more the primary level not the pre-primary. They should have more music... I mean you would probably do more music in the pre-primary than the primary school anyway."  

One teacher was slightly more positive about the provision for music in undergraduate teaching courses. She stated:

"I guess it was enough - otherwise I wouldn't have had the faintest idea. You can build on the basics. I know some other teachers who are more musically inclined than I am and they really build on."

It was obvious that some teachers felt the need for more music education to be included in their teacher education undergraduate studies. The views of teachers appeared to echo the belief put forth by Taylor (1987, p. 83) when he commented that:

it would seem desirable that tertiary institutions should allocate enough time to pre-service courses and enable all graduates to teach music effectively from Years K-3 as a basic requirement.

Although reported some years ago, the Tanglewood Symposium of 1967 raised several issues which concerned the preparation of teachers of young children:

Concerning the quality of music teaching, it was recommended that MENC officially take the position that a teacher with strong music preparation is needed
for each school dealing with children of ages 3-11.

The support shown by teachers for music seminars and workshops would suggest they were concerned for their professional development as teachers and wished to extend or improve their abilities to provide music education to their students.

12 teachers (57.1%) mentioned they had attended music workshops in the previous two years. Nine teachers (42.8%) revealed they had not participated in any workshops during that same time period. It was interesting to note that eight of the ten teachers who had attended music workshops all stated they had been to introductory "Upbeat" workshops for pre-primary teachers. One teacher commented on the advantages of using "Upbeat" for teachers with limited musical backgrounds. She mentioned that "For those teachers without musical backgrounds, it's got it all there. It's easy to follow. It practically has all the stuff you'd ever need for pre-primary music."

The emergence of a musical package so widely accepted by teachers could perhaps contribute to the common utilization of tape recorders by teachers in pre-primary schools (as shall be documented in the resources and facilities section of this project). The comments received from teachers concerning the availability of a package such as "Upbeat" were positive and met with much rapport. One particular teacher was most enthusiastic about the package and stated:
"The children absolutely love it. It gives them variation. It's much, much more exciting - fabulous. It's great for someone who doesn't have much of a musical background...who doesn't know much about music."

Its ease of utilization by teachers with limited musical knowledge has heightened its attractiveness with those teachers.

Conclusions and Recommendations

The results revealed that the musical backgrounds/preparation of teachers were varied. The number of music education units undertaken during undergraduate studies ranged from one to seven, indicating that teachers had gained different levels of musical knowledge.

Five teachers (23.8%) chose music education as their area of specialization and this tied with the number of teachers who completed junior primary studies as major option sequences/specializations (those from Graylands and Claremont). Music education and junior primary were favoured areas.

The timetabling of units for a music option sequence was seen by a small number of teachers to be unsympathetic to those who wished to undertake the major sequence but because of other responsibilities such as part-time employment or family commitments they were unable to choose the area of music as a specialization. A teacher also suggested that pre-service pre-
primary teachers be encouraged to complete majors in music education - it being "where most music is done."

It was found that music education units offered at the tertiary institutions from which the teachers graduated exhibited similarities and differences of musical content. Noticeable main diversions from the majority of teachers who studied the recorder, participated in movement and music activities, learned programming techniques and lesson presentation and utilized percussion instruments, were the choral and solfa experiences of teachers. It was noted that great variation was evident in the musical backgrounds of teachers owing in part to the differences of content to which they had been exposed whilst at their respective tertiary institutions (and their pre-tertiary music studies).

The ability to play an instrument was also investigated. It was observed that although teachers were able to play instruments, that ability did not ensure its utilization in the musical experiences for students in their centres. One teacher stated she was unable to include the piano in any pre-primary musical activities because a piano was not available in her centre. In this case a lack of instrument availability hindered piano inclusion in the pre-primary musical activities.

Conversely the presence of electronic keyboards in two pre-primary schools did not ensure their use for musical purposes by the teachers in those centres. Both the teachers registered
concern that they could not play the instrument and therefore it was not part of their pre-primary music programmes. This contrasted with the initiative of another teacher who taught herself to play the organ/electronic keyboard.

That a basic knowledge of theory and electronic keyboard interaction is developed and provided to undergraduate student teachers during their music education studies is important. Teachers commented on the way in which the electronic keyboard assisted greatly in the management of unison singing and compensated for an inability to provide correct starting notes/in-tune singing.

Teachers saw the need for undergraduate music studies to cater more appropriately for those student teachers with limited musical backgrounds. The suggestion was brought forward that different core units which could cater specifically for the varied musical backgrounds of teachers (those with minimal knowledge and those with advanced understandings) be made available for pre-service teachers. This would help to minimize potential disadvantages spoken of by teachers with limited musical backgrounds. It would also allow teachers with previous musical knowledge to extend their understandings whilst of course learning about methodologies and programming considerations for early childhood development.

It was interesting to trace the decline of core music education tertiary units since 1978 and compare the allocation of
music education units to the number of language arts units available in undergraduate courses at both Edith Cowan University and Curtin University of Technology. Teachers were in favour of more core music education units which might better prepare teachers with limited musical background for the teaching of music education in pre-primary schools.

The attendance at "Upbeat" workshops by teachers and their subsequent praise of the package's appropriateness for use by teachers with little or no musical background could have suggested that teachers were indeed searching for an aid which could compensate somewhat for a lack of musical knowledge or confidence.

The area of increased confidence was mentioned by the "Music Framework Kindergarten - Grade 12" (1988, p. 9) in which it was found in a study undertaken that many qualified teachers of music (specialists) believed their "unqualified" colleagues "needed confidence-building music education and appreciation workshops and methodological training." The teachers interviewed for this project spoke most favourably of music inservices although two complaints were received from teachers who did not attend workshops because of the cost factor.

The undergraduate core music education units may be for some teachers (as could be noted from the comments of some teachers in this section) their first in-depth musical studies.
That over half the number of teachers interviewed mentioned their studies to be inadequate and that requests were put forward for music education to receive greater emphasis in the core unit fixtures of a three year undergraduate early childhood course, indicates that such a request be seriously considered. Unfortunately as Hoermann (1988, p. 88) highlights:

pressures on the tertiary timetable have increased and led...to a decrease in the time allocation for music. Musicians seem to have had little success in convincing institutions and accreditation authorities that music is not 'the same' as maths and language simply because so many students have to start as 'beginners'.

Summary of Findings

1.1. 38% of teachers gained qualifications from the Western Australian Institute of Technology (WAIT)/Curtin University of Technology followed by 33.3% from the Western Australian College of Advanced Education (WACAE) - now Edith Cowan University and 23.8% from Graylands/Claremont Teachers Colleges.

1.2. 71.4% of teachers possess Diploma of Teaching/Education/Bachelor of Arts (E.C.E.) qualifications. 28.6% held Teacher's Certificates.

1.3. Music education option sequences/specializations were completed by 23.8% of teachers which demonstrated that
alongside Junior Primary studies, music education proved to be a somewhat favoured undertaking for pre-primary teachers.

1.4. At least one music education unit had been completed by 90.5% of teachers.

1.5. 23.8% of teachers revealed they had completed three units whilst studying with three units being the most common number completed by the teachers interviewed.

1.6. All teachers revealed they had participated in singing and song game sessions modelled by lecturers from their respective institutions. However, the range of experiences mentioned by teacher graduates suggested a certain breadth of musical activity which differed from the onus placed on unison singing and related games noticeable in the descriptions of musical content provided by a graduate from 1959.

1.7. 76.2% of teachers mentioned they received tuition which concerned the theory of music during their undergraduate course.

1.8. Another 76.2% revealed they had been informed on how to develop programmes for early childhood music education. Resource files were commented upon most favourably by teachers.
1.9. 66.6% of teachers referred to the use of percussion instruments and ensemble performances during their undergraduate music education. Movement and music activities and recorder tuition were also mentioned by 66.6% of teachers.

1.10. Solfa, choral participation, instrumental studies were mentioned by lesser numbers of teachers.

1.11. 47.6% of teachers reported they could play musical instruments. The guitar, piano/keyboard, cornet, cello, violin and trombone were included as instruments played by teachers (the latter three instruments being played by the one teacher).

1.12. The number of formal years of piano tuition ranged from three to seven years. Other teachers were self-taught pianists.

1.13. 33.3% of the 38% able to play the piano/keyboard incorporated the instruments in the musical activities presented in the teachers' centres. 23.8% of the 33.3% used the instruments on an infrequent basis (occasionally during the year).

1.14. Use of the guitar during musical experiences was mentioned by 14.3% of the 19% of teachers able to play the instrument. 4.8% (one teacher) incorporated the guitar into everyday musical experiences whilst the remaining teachers stated the
instrument was used in their centres once per week.

1.15. It was evident however, that even though teachers were in possession of musical instruments their utilization was not ensured. 14.3% of the 47.6% of teachers able to play an instrument incorporated one of their instruments in the everyday musical experiences of children. Another 9.5% of teachers with instruments in their centres did not utilize those as they could play neither a piano nor a keyboard. The teachers' backgrounds and initiatives were obviously factors which could have influenced the utilization of the instruments. Ensuring all teacher's have knowledge of music theory could reduce apprehensiveness to use instruments if available.

1.16. 81% of teachers commented that special vocal training was not an intense part of their courses although many of the teachers indicated that singing practice, learning songs and recognition of pitch intervals were included in the musical studies they completed.

1.17. 57.2% of teachers felt the music education units completed during their undergraduate course to be inadequate. 23.8% argued that the units did not prepare them for real situations, 14.3% stated they did not cater fully for students with non-music backgrounds and another 14.3% felt they were not adequate in providing for pre-primary music education specifically.
1.18. Those teachers without a previous knowledge of music believed they were placed at a distinct disadvantage. Different units designed to cater for the musical needs of student teachers with varied backgrounds would allow teachers to further their musical development according to their previous knowledge and needs.

1.19. Overall numbers of core music education units offered during the early childhood undergraduate course decreased slowly between 1978 and 1991 at Edith Cowan University.

1.20. In 1987, Curtin University returned to providing one core music education unit after five years of retaining two music education units in the undergraduate course.

1.21. At both Edith Cowan University and Curtin University, Language Arts units consistently out-numbered music education unit allocation.

1.22. Additional complaints about the lack of time allocated to music education in early childhood education at both tertiary institutions were received from teachers.

1.23. 38% of teachers declared that the music education in which they were involved prepared them appropriately for their future musical undertakings as teachers. 14.3% mentioned they acquired knowledge on activities appropriate for young children and 9.5% stated students were given necessary
musical background to cater for the musical needs of young children. Integration procedures and heightened confidence were other reasons put forward by teachers.

1.24. 57.1% of teachers mentioned they had attended music workshops in the previous two years. The "Upbeat" workshops received greatest patronage from teachers and were positively evaluated by teachers.
CHAPTER V

B. RESOURCES AND FACILITIES

2.0. Availability of Instruments in Pre-Primary Schools

Introduction

Learning areas such as those allocated to language, science and outdoor activities play important roles in developing the "whole" child, making possible varied and often stimulating experiences which can be given extra dimensions through the use of quality resources and facilities. The quality of each area is improved with the availability of relevant equipment and music education is no exception.

Musical instruments of all types, audio equipment including tape recorders and record players, visual aids, black/white boards, game accessories, teacher resource books and adequate classroom space for gross motor activity, comprise a base list of music resources which can give the young child the necessary stimulus to partake actively in music-making.

Erbes (1988, p. 15) refers to the opportunities a teacher possesses in the lower grades (K-3) to enhance a child's confidence through simple musical activities and to develop positive attitudes and interest towards music education. He mentions the facilitating role of music resources in musical activity when he states that "a variety of materials and
activities can provide impetus" for the achievement of such goals.

The incorporation of a variety of musical resources serves to encourage an appreciation of musical activities and heighten child participation. Their value as components of a music programme has long been recognized by teachers. Forrai (1988, p. 80) elaborates on the use of musical instruments and equipment as a means of "fostering active listening skills to awaken the children's interest in music." Purcell (1974, p. 19) refers to "the use of interesting and exciting materials to stimulate the children's interest."

The creation and utilization of music areas in pre-primary schools which aim to assist positive attitudes towards music and promote skills development, calls for resources to be available so that children may be allowed the:

freedom to explore timbre, rhythm, melody, form and expressive music qualities, as well as singing, playing instruments, composing, listening, categorizing and evaluating. (Kenney, 1989, p. 33).

Given such opportunities, a varied musical diet may arouse children's curiosities and develop favourable attitudes toward musical participation in the pre-primary year of schooling.

Erbes (1988, p. 8) refers to grade level outcomes for music in pre-primary education and says that "Group singing and instrumental performance are recommended." The Western Australian syllabus "Music in Schools K-3" (1980, p. 14) advocates interaction
with varied instruments in early childhood as a means of training young ears and developing "the ability to choose the right sounds for the right effect."

Orff mentioned the importance of providing opportunities to participate in musical activities utilizing tuned and non-tuned percussion instruments in order to acquire techniques of improvisation. He stated that "My idea was to take my students so far that they could improvise their own music" (cited in Lawrence, 1978, p. 133). The skills for such improvisation can be commenced in the early childhood years and this investigation is in response to Orff's claim that "The art of creating music... [comes] directly from playing the instruments themselves."
The investigation will examine the availability and adequacy of musical instruments in the selected pre-primary schools.
Results and Discussion

The table below indicates the percentages of pre-primary schools which were in possession of specific types of tuned instruments. Non-tuned instruments shall be analyzed later. The list was devised in conjunction with the recommendations of the Western Australian syllabus "Music in Schools K-3" (1980), Anderson (1981) and Epstein (1985) who outlined those instruments which they deemed suitable for use with young children. Asterisked instruments refer to those added by teachers to the original list of instruments presented in the interview schedule.

Table 9
Percentage of Tuned Instruments in Centres

<table>
<thead>
<tr>
<th>Tuned Instruments</th>
<th>Number of Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chime Bars</td>
<td>15 (71.4%)</td>
</tr>
<tr>
<td>Tambour</td>
<td>15 (71.4%)</td>
</tr>
<tr>
<td>Xylophone</td>
<td>12 (57.1%)</td>
</tr>
<tr>
<td>Piano/Keyboard</td>
<td>10 (47.6%)</td>
</tr>
<tr>
<td>Glockenspiel</td>
<td>8 (38.0%)</td>
</tr>
<tr>
<td>Metallophone</td>
<td>7 (33.3%)</td>
</tr>
<tr>
<td>Pitched Bells</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>Autoharp</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>*Bottle Xylophone</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>*Didgeridoo</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Tunable Timpani</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>*Kazoo</td>
<td>1 (4.8%)</td>
</tr>
</tbody>
</table>
Tuned Instruments

As can be noted, the tambour and chime bars were included in the tuned instrument repertoire of 15 (71.4%) of the surveyed pre-primary schools. The xylophone was present in just over half the pre-primary schools (12 - 57.1%) and was followed by the piano/electronic keyboard (10 - 47.6%). Instruments in relatively low possession comprised the glockenspiel (8 - 38%), metallophone (7 - 33.3%), pitched bells (3 - 14.3%), autoharp (2 - 9.5%), didgeridoo (1 - 4.8%) and kazoo (1 - 4.8%). It was interesting to note that a bottle xylophone was only used in one (4.8%) of the pre-primary schools. In view of the fact that approximately half the number of centres was endowed with professionally manufactured xylophones and that lesser numbers possessed glockenspiels and metallophones, it may be surprising that more teachers had not used their initiatives to compensate for what could be perceived as a lack of such tuned instruments in some pre-primary schools. Of course a balance could be achieved to an extent if the glockenspiels/metallophones were available in the centres which did not have xylophones.

As table 10 shows, six (28.6%) of the nine (42.9%) pre-primary schools without xylophones had the availability of a glockenspiel or metallophone. Three (14.3%) of the centres did not have access to a scalic tuned percussion instrument although one (4.8%) of the teachers in those pre-primary schools innovated by creating her own bottle xylophone. Chime bars
could perhaps have been included in the assessment undertaken but as the writer was referring to a scalic percussion unit and no teachers reported having complete chime bar scales, it was not included in the previous analysis.

Table 10
Possession of Scalic Tuned Percussion in Centres

<table>
<thead>
<tr>
<th>Possession</th>
<th>Number of Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 of the 3</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>1 of the 3</td>
<td>9 (42.8%)</td>
</tr>
<tr>
<td>2 of the 3</td>
<td>8 (38.0%)</td>
</tr>
<tr>
<td>3 of the 3</td>
<td>1 (4.8%)</td>
</tr>
</tbody>
</table>

Ten (47.6%) pre-primary schools possessed a piano/electronic keyboard. This revealed that 11 (52.4%) of pre-primary schools did not have a useful instrument for enhancing children's learning and for accompanying class music sessions.

Electronic keyboards appeal to young children and its often quoted successful use in pre-primary schools by the teachers interviewed, served to strengthen the cause for its inclusion in early childhood centres. The following list is a compilation of positive comments from teachers with access to electronic keyboards in their pre-primary schools.
"The keyboard is good when you're starting a new tune because the children can really hear what you're playing."

"The thing they love the most is the keyboard because it has 200 different sounds that it can make, rhythm patterns...it really is great."

"The kids jig up and down and they can play some of these little tunes on it."

"It's very effective to teach children the tune."

"I'm interested in music so I bought my own keyboard and I play that with the children and I don't mind doing it."

One teacher was apprehensive about using a keyboard and another stated "We have an electronic keyboard but I can't play. I don't use it at all." All other teachers with keyboards in their pre-primary schools possessed enough knowledge to demonstrate a basic keyboard competence to introduce new songs to their students. Those teachers mentioned reasons for their abilities to utilize the instrument. They included having previous instrumental experience, learning some theory during undergraduate studies and being self-taught. Perhaps greater reference to the use of keyboards in undergraduate courses could ensure all teachers possess a basic knowledge of keyboard skills and operation. Another teacher who had studied the piano for several years had no keyboard in her centre.

The use of the piano and other equipment in early child-
hood centres was mentioned by Anderson (1981, p. 38) when she
commented on elementary music and stated that "The piano,
record player...furnish excellent accompaniment for rhythm
band activities." One teacher with a piano in her centre
described its varied use. Apart from its regular use by a
skilled teacher, aide or parent as an accompaniment to class
singing, or as a means of demonstrating the high-low pitch
concept, the teacher revealed her flexibility in allowing her
students to explore the piano, attempting to create and play
simple tunes. It was in only five (23.8%) of the centres with
pianos/keyboards that children were permitted access to the
instruments. The main reason put forth regarding limitations
for child use included concerns for noise levels and the
possibilities of harsh treatment by children.

Informal experiences can broaden children's musical
understandings and "provide children wonderful opportunities
for sound exploration and experimentation" (Miller, 1974,
p. 3). Epstein (1985, p. 46) adds:

Many an adult's intense interest in music has begun
in childhood with a private exploration of what those
magic keys can do, how a tune can be picked out and
how some notes played together sound crunchy and
exciting.

It may seem that potential lessening of teacher
restrictions concerning informal child use of keyboard
instruments could be achieved if success stories were made
known to teachers.
Another tuned instrument, pitched bells, was favourably mentioned by three teachers (14.3%) who added the instrument to the original list of tuned instruments contained in the interview schedule. One teacher stated "the children love them" and another said she would appreciate having more of the bells in her instrument collection.

The kazoo was an interesting mention by one teacher (4.8%) although due to hygienic reasons the kazoo in her possession was not used. The tunable timpani also was named by one teacher. The instrument was not familiar to teachers, many of whom asked for descriptions in order to gauge its existence in their instrument collection.

Non-Tuned Instruments

Once again teachers added the instruments they possessed to the original list which allowed for a greater assortment of non-tuned instruments to be examined. Bells (wrist and cluster), maracas and triangles headed the list with percentages of 100% which acknowledged that all pre-primary teachers surveyed had such instruments in their centres. Any perceived instrument inadequacies from the perspectives of teachers shall be discussed later.

As is evident in the table overleaf, tambourines were available in most pre-primary schools (20 - 95.2%). Other
non-tuned percussion instruments included: woodblocks/toneblocks (19 - 90.4%), castanets (18 - 85.6%) and drums (18 - 85.6%). 16 pre-primary schools possessed claves (76.1%) followed by cymbals (14 - 66.6%) and finger cymbals (13 - 61.8%).

Table 11
Possession of Non-Tuned Instruments in Centres

<table>
<thead>
<tr>
<th>Non-Tuned Instruments</th>
<th>Number of Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maracas</td>
<td>21 (100%)</td>
</tr>
<tr>
<td>Bells</td>
<td>21 (100%)</td>
</tr>
<tr>
<td>Triangles</td>
<td>21 (100%)</td>
</tr>
<tr>
<td>Tambourines</td>
<td>20 (95.4%)</td>
</tr>
<tr>
<td>Wood/Toneblocks</td>
<td>19 (90.4%)</td>
</tr>
<tr>
<td>Drums</td>
<td>18 (85.6%)</td>
</tr>
<tr>
<td>Castanets</td>
<td>18 (85.6%)</td>
</tr>
<tr>
<td>Claves</td>
<td>16 (76.1%)</td>
</tr>
<tr>
<td>Cymbals</td>
<td>14 (66.6%)</td>
</tr>
<tr>
<td>Finger Cymbals</td>
<td>13 (61.8%)</td>
</tr>
<tr>
<td>Guiro</td>
<td>8 (38.0%)</td>
</tr>
<tr>
<td>Sandblocks</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>*Coconut Halves</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>*Bongo Drum</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Lagerphone</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>*Poinsettia Pods</td>
<td>1 (4.8%)</td>
</tr>
</tbody>
</table>

A decline was found in the total number of pre-primary schools which owned the remaining listed instruments. The unique sounding guiro was possessed by eight pre-primary schools (38%) whilst the lagerphone and bongo drum were each reported to be in the instrumental collections of one pre-primary school (4.8%). On a rating of 9.5%, two teachers
included coconut halves as novel additions to the list followed by poinsettia pods (1 - 4.8%). It appeared that some teachers took initiative to provide opportunities for their students to interact with a variety of sound producing devices in association with their experiences with more common instruments. However, it must be noted that of the three pre-primary teachers (14.3%) who included natural resources as part of their instrument collections, two teachers (9.5%) felt that the instruments they owned were inadequate with regard to quality and numbers. The use of natural resources may have been employed to compensate for perceived insufficient or deficient instrument collections.

It was obvious overall, that the percentages of pre-primary schools with specific non-tuned instruments were greater than the results achieved for tuned instruments. On seven occasions non-tuned instruments received ratings of over 80% whilst 71.4% was the highest rating for tuned instruments.
3.0. **Instrument Use in Pre-Primary Schools**

The table below presents the results of an investigation of the frequency of tuned and non-tuned instrument use per week by students. In addition, the most favoured instruments of students are noted as well as average frequencies of usage.

**Table 12**  
Frequency of Instrument Use Per Week

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Non-Tuned</th>
<th>Tuned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyday</td>
<td>15.70%</td>
<td>12.20%</td>
</tr>
<tr>
<td>2/3 Times</td>
<td>20.20%</td>
<td>23.00%</td>
</tr>
<tr>
<td>Once</td>
<td>54.70%</td>
<td>40.50%</td>
</tr>
<tr>
<td>Rarely/Never</td>
<td>9.60%</td>
<td>24.30%</td>
</tr>
</tbody>
</table>

(Margin of error .2%)

Both the tuned (12.2%) and non-tuned instruments (15.7%) revealed close but low percentage scores for everyday usage. It was again noticeable that similar percentages were achieved for tuned (23%) and non-tuned instruments (20.2%) regarding usages of two or three times per week. Instrument usage of once per week showed a rise in student utilization of instruments but at a lower frequency rate. 54.4% of non-tuned instruments were used once per week by students. The situation with tuned instruments (40.5%) also showed that as the number
of student-instrument interactions increased the frequency of use decreased. In such instances, students interacted with instruments at a rate of once per week.

The remaining frequency option revealed the percentage of instruments with which students rarely or never engaged. The writer added the option of "rarely" to the original interview schedule in response to the many teachers who stipulated that their students might utilize certain instruments once every one or two months.

Table 12 shows that an average 9.6% of non-tuned instruments was rarely/never played by students. This was followed by the interesting figure of 24.3% for tuned instrument use. The results can be clearly seen in table 12.

Figure 6 (overleaf) shows the compiled averages of combined use of tuned and non-tuned instruments. The availability of instruments in pre-primary schools could possibly influence the degree to which they were utilized. Without tuned and non-tuned instruments, a major component of young children's musical experiences could be neglected. One such case was observed in a pre-primary school in which no tuned instruments were available except an old tambour (the teacher was not sure whether she still possessed the tambour). The teacher and children did make instruments during craft activities, but the longevity of such creations was not encouraging. She explained she felt her children were not receiving the benefits which could be gained
Figure 6 (a).

Figure 6 (b).
from regular experiences with quality musical instruments.

**Student-Instrument Interaction - Music Corners**

The presence of instruments in pre-primary schools does not guarantee regular child utilization. The results shown in table 12 and figure 6 could possibly have been affected by influences which arose from child or teacher preferences, the quality and quantity of equipment offered and the circumstances in which the instruments were made available to students. A teacher who restricts student use of a metallophone to one or maybe two music sessions per week, is providing only minimal interaction with a tuned instrument in formal, controlled situations. It is understandable then that children may not be able to play the instrument on two or three occasions or indeed everyday because they are not given the opportunity. The provision of music corners in pre-primary schools may assist the utilization of instruments in which children can be permitted informal interactions with tuned and non-tuned instruments and thereby encourage personal exploration and creation.

Question 19 on the interview schedule encouraged teachers to provide insight into the types of musical experiences they presented to their children. It was evident that activities which asked for improvisatory responses from students were lacking in the repertoires of teachers during formal music time. Two teachers (9.5%) without music corners mentioned the
use of ostinati and personal student creations as alternative uses to the regular beat and high-low experiences for which tuned instruments are usually reserved. The results showed that minimal time was spent on individual creative pursuits incorporating tuned instruments during the formal sessions set aside specifically for music.

In addition to providing informal interactions with tuned instruments, the music corner may also be used to give opportunities to play a variety of non-tuned instruments. Miller (1974, p. 4) lists the different uses of both tuned and non-tuned instruments which include: the accompanying of songs; rhythmic activities and records; creating special effects and original compositions or as tools for sheer sound exploration. Such varied learning situations can be made available to students during formal and informal activities - the music corner acting as a means of broadening the experiences encountered in the more structured musical sessions planned by teachers. The provision of music corners in the surveyed pre-primary schools may be noted in Table 13.

Table 13
Pre-Primary Schools with Music Corners

<table>
<thead>
<tr>
<th>Music Corner Allocation</th>
<th>Pre-Primary Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Music Corners</td>
<td>4 (19.0%)</td>
</tr>
<tr>
<td>Without Music Corners</td>
<td>11 (52.4%)</td>
</tr>
<tr>
<td>With Non-Constant/Occasional Music Corners</td>
<td>6 (28.6%)</td>
</tr>
</tbody>
</table>
Table 13 shows a distinct difference in the percentage scores of pre-primary schools with music corners (4 - 19%) and those without (11 - 52.4%). It was revealed that over half the number of pre-primary schools surveyed did not encourage informal interactions with musical instruments in the form of music corners. Centres often had musical instruments which were not regularly available to students.

Six teachers (28.6%) mentioned that occasional music corners were organized in their centres when appropriate. This signalled that ten pre-primary teachers (47.6%) catered for some sort of informal instrument use. However the situation still illustrated that more than half the total number of students in the pre-primary schools may not have been involved in informal musical experience. Such circumstances could be compared to the practices employed regarding music corner organization in early childhood centres in the United States of America. Kenney (1989, p. 33) states that "Although preschools frequently include learning centres...few preschools include a music centre [corner]." Explanations concerning their limited use were unfortunately not supplied in the article. Nevertheless, question 18a and b on the interview schedule allowed the writer to probe each teacher for reasons concerning the non-existence of music corners in their respective pre-primary schools. Table 14 lists the limitations mentioned by teachers which encroached upon music corner inclusion.
Table 14
Limitations of Music Corner Inclusion

<table>
<thead>
<tr>
<th>Limitations</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise</td>
<td>12 (57.1%)</td>
</tr>
<tr>
<td>Instrument Misuse</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>Lack of Room Space</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Learning Centre - Interchanges</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Instrument Breakages</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Lack of Instruments</td>
<td>1 (4.8%)</td>
</tr>
</tbody>
</table>

The noise factor was the reason offered by 12 teachers (57.1%) for the sparse use of music corners in pre-primary schools. The following comments were made:

"We had a music corner going here at one stage but it was really noisy."

"I find that a music corner in a centre such as this [a double unit pre-primary] doesn't work...there's too much volume to have someone banging a drum unattended."

"They want to play them all the time."

"I found myself saying 'Play it quietly'...and they don't enjoy playing it quietly."
"They get a bit silly."

"It's pointless...you're creating the friction instead of having it for pleasure."

"They don't play it sensibly, they just play it to make noise, and that's not right."

The problem with noise control forced many teachers to abandon their efforts to install permanent centres for musical exploration, expression and learning. Indeed some of the teachers who referred to excessive noise also raised other concerns restricting the incorporation of music corners in pre-primary school organization.

Misuse of instruments was mentioned by three teachers (14.3%) who described negative experiences with informal instrument usage which included:

"You just can't put out a music corner and go for it because they just end up bashing the instruments."

"They don't use them as they should be used."

The lack of constructive and disrespectful instrument use by students constituted the second most supported reason for restricted informal student interactions. Each mentioned by two teachers (9.5%) were the concerns for room space and the occasional use of designated music corner space for interchanges
with puppet theatres and other learning centres. One teacher elaborated on room size:

"In the traditional, big centres, you could have the space. But here, no."

Additional limitations, each put forth by individual teachers regarded the inappropriateness of music corners. Repairs to music shelving, unsuitability of instruments owing to breakages and damage and the withholding of instruments to enhance longevity were included by teachers. Others raised concerns about severe instrument shortages (1 - 4.8%) which left them unable to establish varied informal or formal musical situations employing instruments. One teacher emphasized that "We do not have a music corner purely because of the fact that we just don't have the instruments."

Recommendations by the MENC - United States, mentions on six occasions the inclusion of musical instruments in the objectives for pre-primary music education. (Erbes, 1988, p. 10). Objectives become harder to achieve if essential materials are not forthcoming - as with the case just described in which deficient instrumental equipment prevented opportunities for students regularly to play instruments (if at all) and interrupted any hopes the teacher may have held for the possible organization of a music corner in her pre-primary school. Such circumstances could perhaps be likened to any teacher of music whose resources may be unfit for proper use.
Mark (1978, p. 107) illustrates the American school music situation during the late 1970’s when he stated:

Facilities and equipment are often less than adequate. Given those conditions, most American music teachers are not in a position to adopt new programmes.

In the previous example inadequate instruments did not permit the teacher to establish an informal learning centre or allow her to place emphasis on the playing of instruments in her music programme. The ability to "offer many opportunities for musical learning as they (the students) desire and are capable of assimilating" then becomes more difficult to accomplish. (Mark, 1978, p. 76).
4.0. Adequacy and Condition of Instruments and Equipment
from the Perspectives of Pre-Primary Teachers

Teachers were questioned regarding their perceptions of adequacy of instruments for the musical activities undertaken in their pre-primary schools. (Adequacy in this case refers to sufficient availability of instrument type and supply).

It must be remembered that one teacher's view of instrument adequacy could differ from another's perception of instrument adequacy. The results of question 20a are displayed in table 15 below.

Table 15
Adequacy of Instruments

<table>
<thead>
<tr>
<th>Instrument Adequacy</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruments Adequate</td>
<td>12 (57.1%)</td>
</tr>
<tr>
<td>Instruments Inadequate</td>
<td>9 (42.9%)</td>
</tr>
</tbody>
</table>

Twelve teachers (57.1%) stated that the instruments present in their pre-primary schools were adequate for the musical experiences provided for their children. Nine teachers (42.9%) gave negative responses - the teachers believed that the instruments were not satisfactory for the children's musical activities. It was noted that over half the number of teachers surveyed viewed the instruments in their
possessions to be commensurate with the musical experiences of children. Just under half the total number of teachers revealed concerns regarding the inappropriateness of instruments (types/numbers) to fulfill programme requirements (42.9%). It revealed that a number of teachers was dissatisfied with the instrument situations in their centres. The following table lists those instruments sought by teachers in the pre-primary schools.

Table 16
Instruments Sought by Teachers

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylophone</td>
<td>4 (19.0%)</td>
</tr>
<tr>
<td>Piano/Electric</td>
<td>4 (19.0%)</td>
</tr>
<tr>
<td>Tambourines</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>Bells</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Claves</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Drum</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Glokenspiel</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Autoharp</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Pitched Bells</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Woodblocks</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Tambours</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Cymbals</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Chime Bars</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Maracas</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Guiro</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Kazooos</td>
<td>1 (4.8%)</td>
</tr>
</tbody>
</table>

Of the above, the non-tuned and tuned in percentages are:

- Non-tuned (46.70%)
- Tuned (53.30%)
As is listed, a range of instruments was requested by teachers which could signal deficiencies in both tuned and non-tuned instrument collections. The xylophone headed the list, being mentioned by four teachers (19%), which could indicate that more emphasis on tuned percussion was sought but their unavailability made implementation difficult.

Tuned instruments again became the focus for increased accessibility in pre-primary schools in which the piano and electronic keyboards received a combined rating of 19%. A desire for more tambourines was mentioned by three teachers (14.3%). Many teachers commented on the popularity of that instrument among children. It was interesting to note that although bells and maracas were available in every surveyed pre-primary school (as could be seen in table 11), two teachers (9.5%) requested additional bells and one teacher (4.8%) wished for more maracas. Two teachers (9.5%) stressed the need for full class sets of instruments. As one teacher highlighted:

"There are just not enough to go around and I don't think it's fair when some kids are sitting with instruments and others are not."

Another stated: "I would like to have just basic things. Things which we don't have." One other teacher mentioned:

"If we had more, more children would be able to use them."

This point can relate to the availability of instruments for student usage which may not only be controlled by teacher
restrictions imposed on instruments but can be determined by the number of instruments present in a centre.

Eight specific non-tuned instruments were requested by teachers which equalled the sum of tuned instruments called upon by others. However as was noted in table 11 the percentages of non-tuned instruments were on average, higher than scores associated with the number of tuned instruments in pre-primary schools. Such a situation could possibly be influenced by the excessive costs of instruments which weighs heavily in favour of non-tuned instrument purchases. Financially it would be easier for a teacher to acquire three sets of claves which would allow three children to participate immediately in musical tasks, than to buy an expensive xylophone which not only depletes financial resources but also limits musical interaction to one or maybe two children at any one time.

Problems resulting from a lack of funds was illustrated by one teacher, who stated:

"I would like to have more instruments but the school has no money. We have to split the children into two groups to share the instruments and even then there are not enough."

The circumstances show how children’s interactions with instruments may be hampered owing to evident inadequacies. The limited availability of instruments therefore restricted
their usage by students.

On a somewhat brighter note, 100% of teachers indicated that instruments they did possess were easily accessible. All teachers reported that instrument collections were housed in the centres to enhance accessibility. 20 teachers (95.2%) stated they were allowed exclusive use of all music equipment present in the pre-primary schools. One teacher (4.8%) did not have that privilege in which musical resources were shared amongst all primary school classes. That type of arrangement could possibly allow for a greater variety of instruments to be utilized in the pre-primary school as each class draws on the individual resources of other classes including the pre-primary equipment. However it can not be assured if particular resource items are to be consistently available when required.

Table 17
Accessibility and Exclusive Use of Instruments

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>21</td>
<td>0</td>
<td>(100%)</td>
</tr>
<tr>
<td>Exclusive Use</td>
<td>20</td>
<td>1</td>
<td>(95.2%)</td>
</tr>
</tbody>
</table>

Borrowing of instruments by teachers was also investigated. 16 teachers (76%) stated they did not borrow instruments from
other sources. Five teachers (24%) mentioned occasional borrowing of instruments from primary schools, other teachers and primary school resource centres and music specialists. It was noticeable though that teachers preferred to use their own musical instruments rather than borrow from others. From the nine teachers (42.9%) who stated that their musical instruments were inadequate, five teachers (24%) made occasional borrowings. This left four teachers (18.9%) who persisted with instruments they considered to be less than adequate and who refrained from enlisting the help of other sources to compensate for any perceived deficiencies.

Table 18
Borrowing by Teachers of Instruments

<table>
<thead>
<tr>
<th>Borrowing</th>
<th>Yes</th>
<th>16 (76.0%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>5 (24.0%)</td>
</tr>
</tbody>
</table>

Table 19
Borrowing by Teachers with Perceived Inadequate Instruments

<table>
<thead>
<tr>
<th>Inadequate Instruments</th>
<th>9 (42.9%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrowing</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5 (24.0%)</td>
</tr>
<tr>
<td>No</td>
<td>4 (18.9%)</td>
</tr>
</tbody>
</table>
Music Resources

Teachers were also questioned regarding other types of equipment they employed for music lessons. The table below shows a variety of resources used by teachers to assist the provision of fulfilling and motivating musical experiences.

Table 20
Music Resources Used by Teachers

<table>
<thead>
<tr>
<th>Music Resources</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tape Recorders</td>
<td>18 (85.7%)</td>
</tr>
<tr>
<td>Record Players</td>
<td>16 (76.2%)</td>
</tr>
<tr>
<td>Props/Dress-up</td>
<td>5 (23.8%)</td>
</tr>
<tr>
<td>Posters/Charts</td>
<td>4 (19.0%)</td>
</tr>
<tr>
<td>White/Blackboards</td>
<td>4 (19.0%)</td>
</tr>
<tr>
<td>Song Cards/Signature Pictures</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>Symbol Cards</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Books</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Self-Made</td>
<td>1 (4.8%)</td>
</tr>
</tbody>
</table>

It can be seen that 18 pre-primary schools (85.7%) had access to tape recorders. When compared to the availability of instruments in pre-primary schools, the tape recorder was present in more centres than were drums, castanets, claves, tambours and chime bars. The emphasis on the use of tape
recorders to enhance music instruction was also consistent with the support given by teachers for record players (16 - 76.2%). The onus on such equipment may indicate that listening to music and singing comprised a large part of the regular musical experiences of children.

Miller (1974, p. 5) refers to the need for suitable audio equipment to be in every elementary school room and highlights:

> the fact that children are accustomed to hearing quality [sound] systems in their homes...[to] recognize that good equipment will last for years and benefit countless numbers of children.

The popularity of audio equipment in pre-primary schools heightens the potential for greater exposure to the abundance of songs and tapes on the educational resource market which are specifically designed for children in the early childhood years of their development. As two teachers commented: "I lean very heavily on the tape recorder" and "The tape recorder gets used all the time."

Dress-up clothes/props/ribbons/streamers were materials available to students specifically for musical activities in five of the pre-primary schools (23.8%) to promote creative dance, enrich musical stories, further skills of imagination and encourage participation. Four of those teachers (19%) mentioned they did not have music corners organized in their centres where students could informally interact with instruments and incorporate other stimuli such as clothing and scarves. The preferred formal availability of instruments to students by
teachers, was noted to be in common with the restrictive practices employed by teachers regarding informal usage of enrichment equipment for musical purposes such as dress-up materials and props.

White/black boards and magnetic boards were utilized by four teachers (19%) for musical purposes. One teacher explained the importance of a blackboard for developing valuable pre-reading skills. She stated:

"I use the blackboard for melodic shapes. I might ask someone to draw me a sound from low to high...we actually draw pictures and they have to guess how the sound should go. We play lots of other games on the board as well. They're pre-reading skills."

Such statements were received from a minority of teachers.

Also reported by four teachers (19%) were use of posters and charts of varied types to increase children's knowledge of different orchestral and ethnic instruments. In addition, beat charts were utilized by teachers. One teacher commented favourably on the music charts and other resources she created as part of her undergraduate teacher education course.

"I can't see any purpose of making them if you're not going to use them. That's the best thing about doing your studies at the institution I went to. If you talked about something, you made it the following week. I use my aids all the time."
The willingness of teachers to construct their own music aids and resources was noticeable from the comments of other teachers who mentioned that they made musical symbol cards (2 - 9.5%) for their students. Positive comments such as "They [the students] know their ta's, ti-ti's and sa's" and "They love beat games...they all can clap correctly" were received from enthusiastic teachers. One teacher (4.8%) included children's picture books containing favourite songs and nursery rhymes in her list of equipment employed for pre-primary teachers (14.3%). The number could be considered low in view of the fact that the Western Australian Ministry of Education supplies all Perth Metropolitan pre-primary schools with sets of signature pictures (1991). Their unpopularity amongst pre-primary teachers could reveal a lack of understanding concerning appropriate usage. Finding purposeful uses for the song cards was difficult for some teachers who stated that they presented no challenges to children - "I mean if you hold it up [the song card] and say 'This is little pussy'...so what? Big deal."

However there were teachers who praised the use of the cards for the musical experiences of children. A teacher commented: "We put the song cards in the box or onto the easel...then the children can sing them themselves." In this case the cards provided the necessary motivation for informal musical encounters such as singing; the children received the impetus to engage in spontaneous musical activity.
The results of question 24a are presented which asked teachers to indicate whether they judged the musical instruments and equipment (previously discussed) used in the pre-primary to be in good condition. "Good" condition refers to instruments and equipment which are perceived by teachers to be of sound quality and which allow for appropriate and safe use by students in the manner for which they are intended. Teacher perceptions could differ and be influenced by varied expectations held regarding quality and appropriate use. However, teachers were supplied with a definition of the term "good" and questions were answered in that context.

Table 21
Perceived Condition of Musical Instruments and Equipment

<table>
<thead>
<tr>
<th>Perceived Good Condition</th>
<th>Yes</th>
<th>12 (57.1%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>9 (42.9%)</td>
</tr>
</tbody>
</table>

As is evident, nine teachers (42.9%) gave negative responses which highlighted a concern about defective musical resources in their centres. It was also observed that every teacher who commented that musical instruments were inadequate for the musical activities undertaken in their pre-primary schools in question 20a also had qualms which related to the poor condition of instruments and other equipment in their possessions. Those teachers with perceived instrument inadequacies appeared to lack not only instruments but also satisfactory musical equipment and
resources. Links might be established between the presence of inadequate musical instruments in centres and the existence of inferior equipment and resources. All teachers who mentioned that instruments were inadequate revealed dissatisfaction regarding the condition of musical instruments and equipment in question 24b.

Pre-primary school location and instrument/equipment adequacy and condition are revealed in table 22.

Table 22
Location of Pre-Primary Schools, Instrument Adequacy and Condition of Instruments and Equipment

<table>
<thead>
<tr>
<th>Location</th>
<th>Adequate</th>
<th>Inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-site</td>
<td>12 (57.1%)</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>Off-site</td>
<td>0 (0%)</td>
<td>6 (28.6%)</td>
</tr>
</tbody>
</table>

It is noted that 80% of teachers with on-site pre-primary school locations were satisfied regarding the adequacy and condition of music resources. 20% of teachers in on-site pre-primary schools reacted with negative statements. The most striking figure concerned off-site pre-primary school locations.

Of the six off-site pre-primary schools included in the survey, six teachers in those centres perceived instruments to be inadequate and both instruments and equipment to be of
inferior condition. Although the six pre-primary schools constituted a small group, communication between off-site pre-primary schools may contribute to inadequacies and the sub-standard quality of instruments and equipment in the centres. Perhaps if stronger links with primary schools could be established, Principals and administration would be more aware of pre-primary school needs - their integration would warrant closer attention. As one teacher situated in an off-site pre-primary school mentioned:

"It's a real problem being away from the primary schools. Information about new materials and inservices sometimes gets passed on here down to us...sometimes it doesn't."

A concern rated highly by teachers although not specifically pertaining to the problem of instrument and equipment quality and condition was the lack of instruments in pre-primary schools.

Table 23
Teacher Dissatisfaction Regarding Condition of Musical Instruments and Equipment

<table>
<thead>
<tr>
<th>Complaint</th>
<th>Number of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient Musical Instruments</td>
<td>5 (23.8%)</td>
</tr>
<tr>
<td>Lack of Funds</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>Old Instruments</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Broken Instruments</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Damaged Record Player</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Better Music Trollies</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Slow Order Deliveries</td>
<td>1 (4.8%)</td>
</tr>
</tbody>
</table>
The demand for more musical instruments received the support of five teachers (23.8%) who utilized question 24b to voice their concern in areas which required attention. Comments such as: "We need more of the basic instruments like claves;" "There are not enough to go around...it takes twice as long and they get bored with a song" and simply "We need more" were communicated by teachers to emphasize their musical instrument concerns. The want for greater numbers of instruments was obviously an area which teachers wished to rectify.

Three teachers (14.3%) believed that lack of funds was responsible for inferior instruments and equipment in their centres. One teacher stated:

"We just don't have the finance to buy the sort of musical instruments that should be around. If you're looking at buying a drum, you're probably looking at about $40 to buy a really good one. We certainly need some maracas...we just don't have the finance for that."

Another teacher summed up the unfortunate situation:

"We need more instruments. We need more money. Everybody does." Without the availability of sufficient funds, the possibility of purchasing quality instruments and equipment becomes more difficult. The alternative to buying expensive instruments is to turn towards the cheaper instrument brands where longevity can not be assured. The disadvantage of taking the less financially draining option was best illustrated by a teacher's personal experience: "The instruments we get access to are really cheap. They keep breaking really easily. They should get good quality
ones." If teachers were able to invest money for the purchase of quality instruments and equipment in their initial financial outlays the constant need to replace such musical resources could be reduced somewhat. However, increased funds for music expenditure purposes is not always possible, and some of the reasons shall be investigated later.

Two teachers (9.5%) complained that many of their instruments and much of their equipment were of sub-standard condition owing to regular usage over many years. The inability of teachers to replace old and worn instruments and other music resources for reasons which could include funding problems or lack of initiative, means that resources progressively deteriorate and may remain in use even when unfit for musical application (for example: dangerous; non-sound producing). When asked to indicate her areas of concern regarding instruments and equipment for music a teacher remarked: "Yes ...I'd like to get some new instruments. I think we desperately need some new ones and more basic ones."

Requests were also voiced by teachers for additional instruments to replace those which could not properly function as a result of breakages. Two teachers (9.5%) commented on damages to instruments which had contributed to depleted instrument collections. As one teacher affirmed: "The instruments are there but they're just so beyond any musical coverage...beyond even considering giving to the kids really."
One teacher frequently utilized teacher-made instruments as a means of maintaining a repertoire of musical instruments. Others called for instruments to be repaired or replaced. The remaining complaints voiced by teachers included; damaged record players, a call for improved trollies specifically for musical instruments, and the slow delivery of ordered instruments (each complaint mentioned by one teacher). A lack of quality instruments in pre-primary schools was the focus of teacher concerns.

Whilst question 24b required teachers to attend to the specific condition of musical instruments in their centres, it was apparent that they also wished to discuss other pressing issues, including for example, insufficient funds and resource delivery delays, both of which could ultimately affect the quality/condition of instrument collections and music resources in pre-primary schools. The promising figure of 57.1% for teachers content with the quality of music resources in their pre-primary schools would be greater if procedures were undertaken to improve the standard of instruments and equipment.
5.0. Adequacy of Room Space

Introduction

The amount of room space available for students can determine the extent to which music education activities are initiated in pre-primary schools. Confined areas may deter teachers from pursuing gross motor movement and music sessions with large body movement and music experiences not being explored to their potential by students in their pre-primary year.

Adequate room space can provide the opportunity for students to participate in activities which encourage uninhibited, expressive action where the child has the freedom to exercise large body motions without the imposition of tight, almost claustrophobic conditions which were unfortunately evident in some pre-primary schools.

The availability of sufficient room space to allow imitative, imaginative and secure movement and dance in which whole groups can participate, may contribute to a child's realization that "movement can be spontaneous and that many different motions are possible" (Hoffer, 1987, p. 139). The use of the movement medium to introduce basic music concepts in early childhood education requires that space be available for its implementation. Without adequate space and if safety factors hinder gross motor movement activity, the situation may
not be encouraging for a teacher to pursue rhythmic movement activity.

Results and Discussion

The following table shows the results of question 25a.

<table>
<thead>
<tr>
<th>Table 24</th>
<th>Perceived Adequacy of Space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adequate</td>
</tr>
<tr>
<td>Space</td>
<td>12 (57.1%)</td>
</tr>
</tbody>
</table>

It can be seen that 12 teachers (57.1%) felt sufficient space was available for music instruction in their pre-primary schools. Nine teachers (42.9%) revealed some dissatisfaction regarding the adequacy of room space. It is interesting to highlight that the same percentage scores for adequacy of space were obtained for questions regarding the adequacy and condition of instruments and other music equipment.

The writer attempted to discover if teachers with qualms concerning instruments and equipment experienced room space problems. The table overleaf dispelled any such relationship as only four teachers (19.1%) of the nine teachers (42.9%) with perceived instrument inadequacies and concerns for the condition
of instruments/equipment confirmed instructional difficulties caused by limited space in their pre-primary schools. This left five teachers (23.8%) who were satisfied with space availability.

Table 25
Inadequacy/Adequacy of Instruments and Inadequacy/Adequacy of Space

<table>
<thead>
<tr>
<th></th>
<th>Adequate Space</th>
<th>Inadequate Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate Instruments</td>
<td>7 (33.3%)</td>
<td>5 (23.8%)</td>
</tr>
<tr>
<td>Inadequate Instruments</td>
<td>5 (28.8%)</td>
<td>4 (19.0%)</td>
</tr>
</tbody>
</table>

Another five teachers (23.8%) on this occasion with space inadequacies believed their musical instruments were sufficient in type and number and that instruments and equipment were in good condition. The remaining seven teachers (33.3%) were content with both their instrument and equipment situations and the adequacy of space in their centres. The percentage of 33.3% actually comprised positive indications in that instruments were perceived as being adequate, that instruments were of suitable quality, that available space was sufficient for music instruction. However, only 14.2% separated teachers who were comfortable with the music situations in their centres from those teachers who signalled difficult circumstances.
It must be remembered that teachers' perceptions of "adequacy" and "good" condition of instruments, equipment and the sufficiency of space, can vary according to the particular expectations held by teachers. A teacher who does not rate music education highly, perhaps preferring to focus on craft work in her early childhood programmes, could believe a small instrument collection and restricted room space to be adequate for her music undertakings owing to the fact that varied musical experiences are rarely undertaken. It could be that class singing with tape recorded music may be emphasized. Instruments could be considered adequate because they are never used by students or teacher.

To add confidence to the responses of teachers it must be mentioned that all teachers received clarification of question intentions prior to answering. For example the word "adequate" when discussing room space was explained to mean whether enough space was available for whole group gross motor movement and music sessions. It is therefore anticipated that as every teacher was briefed on the specific intentions of each question in the interview schedule that greater insight can be gained in relation to the music resource and facility situations occurring in Western Australian metropolitan pre-primary schools.

It is interesting to learn that no pattern could be found in the rating scores put forth by teachers concerning the importance of music education for the education of young
children (question 13) when linked to their replies regarding instrument adequacy or inadequacy. The results show the ratings out of ten given by teachers and their corresponding perceptions of instrument adequacy.

Table 26
Music Education Ratings vs. Instrument Adequacy/Inadequacy

<table>
<thead>
<tr>
<th>Number of Teachers</th>
<th>Rating</th>
<th>Instrument Adequacy</th>
<th>Instrument Inadequacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>10</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>8</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

These results could counteract to some extent the possibility raised earlier which discussed teachers with lower views of early music education and the adequacy/inadequacy of instruments. However, it is only through thorough inspections of instruments/space availability that it could be judged if a lower opinion of music education is congruent with the presence of inadequate instruments/equipment/space in the pre-primary schools. This would be a task for further research.
The following table lists the responses of teachers for question 25b which referred to perceived inadequacies through lack of space.

Table 27
Perceived Inadequacies Through Lack of Room Space

<table>
<thead>
<tr>
<th>Perceived Inadequacies</th>
<th>Number of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inconveniences/Disruption</td>
<td>11 (52.4%)</td>
</tr>
<tr>
<td>Unavailability of Other Rooms</td>
<td>4 (19.0%)</td>
</tr>
<tr>
<td>Safety Factors</td>
<td>4 (19.0%)</td>
</tr>
<tr>
<td>Disallows Music Corner Establishment</td>
<td>2 (9.5%)</td>
</tr>
</tbody>
</table>

A large percentage of teachers (12 - 52.4%) mentioned the inconvenience of not having sizeable room space for music instruction. The teachers elaborated when they stated adjustments such as: moving furniture to provide more floor space for movement activities; needing to use the outdoors for any movement and music sessions; organizing tape recorders/record players and other equipment for usage in the outdoor area and arranging smaller groups of children to participate in movement experiences at different times in which the aide would conduct a lesson simultaneously. Other inconveniences concerned alternating the days particular groups experienced movement activity and the repetition of movement lessons for other groups of children.
Comments from teachers regarding their circumstances included:

"We've got fairly limited space for music instruction. It's very difficult to make a circle in the mat room. Sometimes we have to do it in halves and squash up... they don't seem to mind. We go outside too."

"I would prefer a bigger space for music. Sometimes we go outside."

"For movement they need more space. Sometimes we go into that spare area outside the door but then I need to get batteries for the tape recorder."

Other teachers with qualms about limited room space highlighted the need for teachers to be prepared to adjust the environment for movement and music.

"But you need to move your space around. You have to be flexible about it. I have to rearrange the room for movement sessions then we have a big space."

"I just move the trollies. I've only got these two blocking the way."

"You do movement in groups though. So you get around it. There's no point in moaning about it. This is the space available so adjust."

"The good thing about this pre-primary is that everything is on castors and you just push everything back to make as much space as you like."

The last comment provides insight into the type of
furniture which could assist the readiness of some teachers to rearrange their rooms so that movement sessions could be undertaken frequently. The inconvenience could then be somewhat minimized. It also characterizes the preparedness of positive teachers to make adjustments to do music.

Four teachers (19%) were dissatisfied at not being able to utilize the services of rooms such as primary school music rooms and withdrawal rooms. However, from the writer's discussions with music specialists employed at schools with music rooms, it was apparent that their constant use by many primary school classes did not permit extra time to be made available for pre-primary classes.

One music specialist declared that she was responsible for the musical needs of 18 primary school classes. Another specialist revealed she had to cater for over 500 children each week. The possibility of accommodating pre-primary students other than the arranged 30 minutes per week at some schools was not feasible.

One pre-primary teacher spoke favourably of the space available in music rooms for movement activities: "When we go to the music specialist, her room is much bigger and it's good, very good. There's lots of room." Such an ideal situation was not always encountered in primary school music rooms - as one specialist explained:
"The floor space is not big enough. But, I'm lucky to have this so I can't complain. I would like double the floor space but we're lucky to have this. If we could move some things it would be good."

Safety factors were the concern of three teachers (14.3%).

The need for carpet and larger spaces were emphasized.

"We've spread out a bit more but I would like more carpeted area. I'm hoping to get that area carpeted. It would then be better and we could spread out more."

"Of course I would like a bigger area. Sometimes they bump into a shelf or something, but they know that is the space they've got."

"Because we have a lack of space, I worry about safety factors. Children could get hurt during movement and music."

The pre-primary school year is commonly a period when much movement and activity is undertaken but confined spaces can influence the extent to which large body movement experiences can be explored. In cases where space is restricted, "teachers should adjust the classroom environment as much as possible to accommodate the unique needs of the [music] programme" (Music Framework Kindergarten-Grade 12, 1988, p. 67). Pre-primary teachers are no exception to this call for flexibility. Two teachers (9.5%) also blamed lack of space for their inability to organize music corners in their centres.
Conclusions and Recommendations

Availability of Instruments in Pre-Primary Schools

Results concerning the availability of musical instruments in pre-primary schools showed that overall more teachers possessed non-tuned instruments than tuned instruments. The lack of tuned instruments available in many pre-primary schools was a cause for concern. It was clearly evident that teachers displayed greater confidence when discussing non-tuned rather than tuned instruments. If more teachers were secure with the use of tuned instruments in pre-primary schools there could be an increased willingness amongst teachers to incorporate such a valuable component of student-instrument interactions into their music programmes.

Unfortunately, it seemed that young children's abilities were underestimated in many pre-primary schools as far as tuned instrument usage was concerned. A lack of practical knowledge concerning implementation procedures for the inclusion of tuned percussion in early childhood centres could explain the lower incidence of such instruments in pre-primary schools when compared to non-tuned instruments and their secure existence. Greater in-depth coverage of tuned instrument usage in undergraduate and inservice courses could assist student and teacher realization of the musical benefits to be achieved from interaction with tuned percussion instruments. Emphasis on teacher/child-made instruments could also aid those teachers whose limited finances
did not permit additional instrument purchases. Student-made instruments and the inclusion of natural resources (for example, poinsettia pods) could be areas for further development.

Lack of instruments caused by financial difficulties was also mentioned by three (14.3%) of the nine teachers (42.9%) who believed instruments to be inadequate. The price of two triangle sets as compared to a xylophone illustrates the way in which the expensive costs of many tuned instruments can influence choice of teachers. If teachers are to initiate tuned instrument musical experiences comfortably they require understandings of implementation procedures to supply them with the confidence needed for its regular incorporation. Positive comments regarding electronic keyboard availability in pre-primary schools outweighed any negative statements issued by teachers.

The availability of instruments in pre-primary schools is a serious issue. The high prevalence of non-tuned instrument collections highlighted a deficiency in the tuned instrument repertoires of many centres. Possible reasons for the situations have been explored. Financial stringency is not the sole cause—three teachers (14.3%) cited lack of funding as the reason for depleted instrument numbers. It could be that teachers need to review the purposes for having instruments, the ways in which both non-tuned and tuned instruments can enrich a music programme and use their initiatives to ensure that a variety of instruments and other sound-producing materials are available in their pre-primaries for the benefit of students attending their centres. It is with
the benefit of students in mind that the availability of instruments to students and thus their usage of instruments be discussed.

Instrument Use in Pre-Primary Schools

A purpose of question 19 was to obtain information regarding the frequency of use of instruments by students per week. The point emphasized was that the availability of instruments in pre-primary schools did not necessarily guarantee instrument use by pupils. Student-instrument interaction commonly took place once per week. The combined averages of tuned and non-tuned instrument use by students revealed that the weekly use of instruments was more frequent.

In centres where occasional/no music centres existed it could be possible that students were rarely or never given opportunities to play certain instruments. Such a situation was found to be present in three (14.3%) of the six (28.6%) pre-primary schools with occasional music corners.

It appeared that even though instruments were present in pre-primary schools the extent of their usage was predominantly determined by teachers for whatever reasons they held - be they noise concerns (12 - 57.1%) or anxieties regarding potential misuse of instruments by students (3 - 14.3%). One teacher (4.8%) was unable to provide instrument interactions for students due to severe instrument shortages.
The organization of music corners in pre-primary schools was suggested in the discussion section as a means of possibly increasing the level of instrument usage by students. Teachers with successful music corners elaborated on the potential for constructive student-instrument interactions.

Other methods of minimizing possible unsuccessful informal music-making experiences could include: the erection of classroom dividers around the music corner to avoid distractions to those children playing instruments and to fellow class members pursuing other tasks; in pre-primaries with several rooms, designate one room to cater specifically for musical needs - tape-recording, playing instruments and informal singing could be conducted. It would however require additional supervision but could be used whenever help was available; place only one of each instrument in the music corner rather than having for example, four triangles; in double-unit pre-primary schools arrange for both teachers to hold their informal music-making between certain time periods; limit the number of children permitted into the music corner at any one time - this restricts the number of instruments being played together.

Additional suggestions include: swapping the instruments offered each day. For example: have available the cluster bells instead of the wrist bells; use instruments more during formal music sessions so children become accustomed to their purposes and correct use; later in the year use charts/stickers/pictorial representation to encourage constructive musical playing
so that students may attempt more purposeful usage; be more involved in the student-instrument interactions by guiding, suggesting and encouraging; arrange a music corner on a well-covered verandah in the summer months to allow children to use the instruments outdoors, perhaps on a large mat/tarpaulin; if necessary, deaden some potentially disturbing sounds of instruments offered in the music corner by reducing the number of bells on the wrist bells or by using softer wooden claves and softer mallets; and reorganize classroom space to enable children to better utilize the available instruments.

The lower overall percentage scores of tuned instrument availability and usage in pre-primary schools reflected a similar situation Bartle (p. 43) encountered in 1968. The value of young children's interactions with tuned instruments as a means of heightening interest in music, facilitating in-tune singing and melodic exploration and providing opportunities for children to reproduce known songs were highlighted by Bartle (1968, p. 43) and Kenney (1989, p. 35).

Instrument availability is therefore emphasized. How can one learn to play a reasonable game of tennis if a racquet is not provided? One can become knowledgeable of the rules of the game from the television set or from speaking to others with a basic command of the sport, but without practical experiences and regular practice, a young person's skill may never be developed. In the same way a comparison can be drawn of children and their instruments, be it a clarinet of an upper primary or secondary student or the small glockenspiel shared by many youngsters in a pre-primary school. Without the instrument, the opportunity for child-instrument interaction is not supplied and the child is
deprived.

Burnham (1983, p. 10) notes that even when instruments are available in schools that knowledge of their use may be lacking. Possible instrument abuse by students may be a major factor which determines music corner establishment in pre-primary schools.

The extent to which creative activities were included in the musical activities planned by teachers in formal sessions, revealed that ostinati and personal student creations were lacking - two (9.5%) of the 11 teachers (52.4%) without music corners mentioned the incorporation of such activities when asked by the researcher to elaborate on the uses of instruments in question 19. Question 19 on the interview schedule encouraged teachers to provide insight into the types of musical experiences they presented to their children. Although a specific question concerning musical activity was not part of the interview schedule the interviewer did ensure that all teachers were probed on such a topic via question 19.

A worthwhile venture could be for greater emphasis to be attached to the provision and subsequent use of music corners in pre-primary schools in undergraduate teacher education courses. Pre-service teachers would then receive direction whilst under the guidance of experienced early childhood teachers. The existence of informal music-making centres in pre-primary schools could then become more widespread. It may not incur greater allocation of musical instruments to pre-primary schools, but it would allow
those instruments owned by the centres to be made available to all students. Frequency of instrument usage could be heightened. However the availability of instruments to students for regular usage could be determined by the teaching practices of teachers (formal versus informal) and the quality and quantity of instruments present in pre-primary schools.

The establishment of music corners is possible only if instruments are available for their organization. To enable greater student use of a variety of instruments requires instrument availability - instruments of sound quality, type and numbers in which teachers may be better equipped to "use facilities, supplies and equipment to maximum student benefit" (Music Framework Kindergarten-Grade 12, 1988, p. 64). Teacher perceptions of the adequacy of instruments for classroom use now becomes the focus for discussion.

**Adequacy and Condition of Instruments and Equipment**

As results indicated, 12 teachers (57.1%) perceived the instruments in their possessions to be adequate for musical activities undertaken in their pre-primary schools. Nine teachers viewed their instruments to be inadequate.

The perceived adequacy or inadequacy of instruments could be dependent to some extent on the types of musical experiences provided to children by teachers with varied expectations about the suitability of particular activities and child capabilities. Other variables could include the number of students being
taught, instructional arrangements and methodologies employed.

Results showed that nine teachers (42.9%) who considered their musical instruments to be inadequate also mentioned the instruments and equipment in their centres to be of inferior quality. It was during the question which asked of the condition of instruments and equipment that teachers voiced their concerns for more instruments to be present in pre-primary schools.

Carefully devised purchasing plans may be required to aid the purchasing abilities of teachers on whom the onus is placed to expend finances for the purpose of fulfilling perceived musical needs often in competition with purchases for other learning areas. (Miller, 1974, p. 8). The lack of good quality instruments and equipment in some pre-primary schools could possibly be rectified if "all budgetary funds were spent wisely by teachers" so that children could benefit from varied and enriching activities. (Miller, p. 8).

In centres where expenditure is severely limited, greater emphasis on borrowing practices, making instruments and equipment and fund-raising ventures (with Principal approval) could be necessary to compensate for funding shortages. The initiative of the teacher may then be of utmost importance if provision for music education becomes difficult.
Pre-primary schools may often be separated from their respective primary schools. It is for that reason that the importance of maintaining links with the school and administrators becomes even greater. Informing the Principal of pre-primary school progress and requirements could be a procedure to ensure that the pre-primary teacher "communicates programme needs to the administration" (Music Framework Kindergarten-Grade 12, 1988, p. 64).

A more secure communication with associated primary schools could also lay foundations for the exchange of ideas and music resources with fellow teachers and primary school music specialists. The five pre-primary school teachers who benefited from music specialist services stated they frequently used the specialists as resource personnel to assist their music programme developments and as a means of exposing children to a wider range of quality instruments including ethnic instruments. The availability of a specialist could help music purchase decisions of teachers for those who lack sufficient confidence and knowledge about music equipment. (Miller, 1974, p. 8). The support for music specialist services in pre-primary schools shall be ascertained in a later section.

Concerns were raised during the course of the discussion that the quality of instruments and equipment suffered from student misuse. If instruments were treated with respect through correct modelling of correct usage their longevity could be preserved. In this context, teacher cognizance of the care and
handling of instruments becomes important. Assistance can be received from music inservice courses. (Miller, 1974, p. 2). Overall, inservices were commented upon most favourably by teachers (question 26) although there was a call for more courses to be organized specifically by early childhood personnel.

The majority of teachers in pre-primary schools were satisfied with the adequacy of instruments and the condition of instruments and equipment. That teachers strive to maintain quality instrument collections becomes important - instruments that can serve the young child's natural curiosity and encourage him to "express [his] being by creating" (May, cited in Ronnefeld, 1986, p. 170).

Adequacy of Room Space

Nine teachers (42.9%) reported insufficient space whilst 12 teachers (57.1%) were satisfied with their respective situations. It was discovered that seven teachers (33%) were content with instrument adequacy, the quality of instruments and equipment and the availability of ample room space. Teachers stipulated that flexibility and a willingness to alter the environment were essential if adequate space for movement and music sessions were to be provided.

The consistent use of music specialist rooms by primary school students was named as a major reason for the infrequent opportunities of pre-primary teachers to benefit from additional
room services. Perhaps greater liaisons with music specialists by pre-primary teachers could rectify the situation to some extent if it was desired by the pre-primary teachers concerned.

It is possible that double-unit pre-primary schools where room space could be limited, for teachers to confer to arrive at decisions which would ameliorate the provision of adequate room space in their centres (for example, removing a dividing wall between two centres for some lessons). One teacher employed in a double-unit pre-primary school elaborated upon the need for better communication.

The initiative of the teacher is required to rearrange her centre in order to increase room space so that worries for child safety can be lessened. Teachers need to ensure necessary adjustments are undertaken where possible to provide ample space for movement experiences which are a valuable medium assisting the transfer of key musical ideas. It is anticipated that planners of future pre-primary schools take into account the importance of movement experience in early music education and plan centres which acknowledge that music is an integral part of the pre-primary school experience.
Summary of Findings

Availability of Instruments

2.1. Popular tuned instruments present in the pre-primary schools included: chime bars; tambour; xylophone.

2.2. Piano/electronic keyboards were available in just under half of the surveyed pre-primary schools.

2.3. The use of electronic keyboards in pre-primary schools received positive support from those teachers with access to the instrument.

2.4. Although electronic keyboard use was commented on positively, not all teachers were able to play the instrument or use it confidently. This could have implications for greater reference to keyboard usage in undergraduate courses as a means of encouraging its practical utilization.

2.5. Tuned instruments in relatively low possession comprised: glockenspiel; metallophone; pitched bells; autoharp; didgeridoo; kazoo.

2.6. Three centres did not have access to a scalar tuned percussion instrument.
2.7. 23.8% of the 47.6% of centres with pianos/keyboards provided informal access to the instruments for students.

2.8. Popular non-tuned instruments present in the pre-primary schools included: maracas; bells; triangles; tambourines; wood/toneblocks; drums; castanets.

2.9. Instruments in low possession were the guiro, sandblocks, bongo drum, lagerphone.

2.10. Some teachers took initiative to provide a variety of sound-producing devices/natural resources for student exploration. In some instances the use of natural resources may have been employed to compensate for perceived insufficient or deficient instrument collections.

2.11. Overall, percentages of pre-primary schools with specific non-tuned instruments were greater than the results achieved for tuned instruments.

Instrument Use in Pre-Primary Schools

3.1. Both tuned and non-tuned instruments revealed close but low percentage scores for everyday use and usages of two or three times per week.

3.2. Instrument use of once per week showed a rise in student utilization but at a lower frequency rate. 54.5% of non-
tuned instruments were used once per week by students. 40.5% of tuned instruments were employed by students once per week.

3.3. An average 9.6% of non-tuned instruments were rarely/never played by students. This was followed by the low figure of 24.3% for tuned instrument use.

3.4. Combined tuned and non-tuned instrument use revealed that 47.5% of instruments were used on a once per week basis. 16.95% of instruments were rarely/never played.

3.5. Instrument use may be dependent on factors such as instrument availability and teacher provision in the form of planned and informal instrumental music-making experiences.

3.6. The provision of music corners may heighten tuned and non-tuned instrument accessibility and hence usage.

3.7. Overall there exists lower percentage scores for tuned instrument availability and usage than for non-tuned instruments in the pre-primary schools which reflects a similar situation encountered by Bartle (1968, p. 43) when he discovered that "Melodic percussion instruments are seldom used in infant classes."

3.8. Activities which asked for improvisatory responses from students were lacking in the repertoires of teachers during formal music times.
3.9. Over half the number of pre-primary schools did not encourage informal interactions with musical instruments in the form of music corners. Instruments might have been present in the centres but their regular availability or accessibility to students was not provided.

3.10. Six teachers mentioned that occasional music corners were organized in their centres when appropriate. However, the situation still illustrated that more than half the total number of students in the pre-primary schools may not have been involved in informal musical experience.

3.11. Noise factors were the noticeable teacher justifications for limited use of music corners in the pre-primary schools followed by possible instrument misuse, a lack of room space, instrument breakages and not enough instruments.

Adequacy and Condition of Instruments and Equipment

4.1. 57.1% of teachers stated that instruments present in their pre-primary schools were adequate for the musical experiences provided for their children. 42.9% gave negative responses which is a sizeable proportion of teachers who were dissatisfied with the instrument situations in their centres.

4.2. A range of instruments was requested by teachers which could signal deficiencies in both tuned and non-tuned instrument collections. The xylophone and piano/electronic keyboard headed the list which could demonstrate that more emphasis on
tuned percussion was sought by teachers but the unavailability of those instruments made implementation difficult.

4.3. 19% of teachers stressed the need for full class sets of instruments.

4.4. Eight specific non-tuned instruments were requested by teachers which equalled the number of tuned instruments requested by teachers.

4.5. All teachers indicated that instruments they did possess were easily accessible. 95.2% of teachers stated they were allowed exclusive use of all music equipment present in their pre-primary schools.

4.6. 76% of teachers stated they did not borrow instruments from other sources. 24% mentioned occasional borrowing of instruments from primary schools, other teachers, primary school resource centres and music specialists.

4.7. From the 42.9% of teachers who stated that their instruments were inadequate, 23.8% of teachers made occasional borrowing. This left 19% who persisted with instruments they considered to be less than adequate and who refrained from enlisting the help of other sources to compensate for any perceived deficiencies.
4.8. A variety of resources was used by teachers to assist the provision of fulfilling and motivating musical experiences. Emphasis on the use of tape recorders (85.7%) was consistent with the support given by teachers for record players (76.2%).

4.9. The preferred formal availability of instruments to students by teachers appeared to be in common with the restrictive practices employed by teachers regarding informal usage of enrichment equipment for musical purposes such as dress-up materials and props.

4.10. Signature pictures proved unpopular amongst pre-primary teachers.

4.11. 57.1% of teachers perceived their instruments and equipment to be in satisfactory condition for pursuing musical tasks. 42.9% gave negative responses which highlighted that a significant minority of teachers was disturbed about the prevalence of defective musical resources in their centres.

4.12. Every teacher who commented that musical instruments were inadequate for the musical activities undertaken in their pre-primary schools also discussed qualms which related to the poor condition of instruments and other equipment in their possessions.

4.13. Of the six off-site pre-primary schools included in the survey, all six teachers perceived instruments to be inadequate and both instruments and equipment to be of inferior condition. A
lack of communication between off-site pre-primary schools and their corresponding primary schools may contribute to inadequacies and the sub-standard quality of instruments and equipment in their centres.

4.14. Concerns expressed by teachers included a lack of instruments in pre-primary schools, old broken instruments and a lack of funds.

Adequacy of Room Space

5.1. 57.1% of teachers felt that sufficient space was available for music instruction in their pre-primary schools. 42.9% revealed dissatisfaction.

5.2. 19.1% of the 42.9% of teachers with perceived instrument inadequacies and concerns for the condition of instruments/equipment also confirmed instructional difficulties caused by limited space in their pre-primary schools.

5.3. Positive indications were received from 33.3% of teachers who stated they were content with both their instrument and equipment situations and the adequacy of space in their centres.

5.4. No pattern could be found in the rating scores put forth by teachers concerning the importance of music education for the education of young children when linked to their replies regarding instrument adequacy or inadequacy.
5.5. 52.4% of teachers mentioned a lack of room space to be the cause of inconvenience when undertaking music instruction. (Rearranging furniture, equipment, using the outdoors, organizing smaller groups of children).

5.6. Dissatisfaction at not being able to utilize the services of rooms such as primary school music rooms and withdrawal rooms was mentioned by 19% of teachers.

5.7. Safety factors were the concern of 14.3% of teachers. The need for carpeting and larger spaces was emphasized.
CHAPTER VI

C. PERSONNEL

6.0. The Personnel Responsible for Music Education in the Selected Pre-Primary Schools

Introduction

Traditionally it is the pre-primary teacher who provides for the musical needs of the students in his/her centre. In such a situation the teacher is in an appropriate position to ensure that music education consists not only of formal, planned experiences but that it also permeates other important daily activities such as art, language and movement.

Bridges (1980, p. 33) claims a responsibility of the pre-primary teacher in early childhood education:

The teacher has the role of integrating all areas of the programme and of planning for the needs of individual children. Music...is an integral part of the daily programme, both in its own right and also as an adjunct to almost every other activity in the school day.

Music can be used in the pre-primary year to complement and enhance a young child's learning experiences. A thoughtful teacher can utilize songs, charts and musical instruments to assist a child's understandings of his/her world. Songs can reinforce a child's grasp of terminology. Student-instrument interactions and song actions develop his/her imagination and encourage the realization
of creative abilities. Its use as a valuable tool to nurture the emotional securities of children, to promote a positive self-concept and heighten an awareness of other cultures, highlights the importance of musical exposure as a contribution to the overall development of the child.

It is when integrated experiences are part of a child's daily learning that he/she is able to find meaning and therefore comprehend and make sense of an often confusing and bewildering world. Through such experiences the children can formulate relationships between key ideas, view commonalities and dissimilarities and thereby further their understandings so that they may proceed to greater discoveries.

The significance of integrated learning experiences is acknowledged by Aronoff (cited in McMahon, 1988a, p. 3) in which she stipulates:

It is abundantly clear...that the primary goal of music education will be more likely achieved when the cognitive, affective and physical domains are interrelated in all classroom music experiences.

The pre-primary school offers an ideal environment where an integrated approach to learning can be successfully undertaken. It is the pre-primary teacher (the generalist) who can plan, provide and oversee the integrated learning of her students.

In recent years primary music specialists have become involved (although in small numbers) in the musical development
of pre-primary children. It is not surprising although still uncommon to find specialist music services operating on a once a week basis in metropolitan pre-primary schools. Music specialists are now being added to the list of other personnel such as teacher aides, parents and visiting musicians who occasionally assist the pre-primary teacher in the implementation of musical activities or in the provision of additional musical experiences.

Music specialist undertakings in pre-primary schools could signify a new beginning of specialist utilization in the centres. At present (1991) specialist services are not contracted to include pre-primary schools. Those centres with music specialists receive a privilege which a majority of pre-primary schools do not obtain even when requested. The music specialist is not obliged to accept pre-primary music responsibilities however minimal the requests of the pre-primary teacher. The music specialist is employed at the primary schools to cater for the musical needs of children in years one to seven.

The music specialist situation has been explored and pursued by music educators in recent years. Much of the literature has centred on the music specialist versus general classroom teacher debate regarding primary school classes. Reference to pre-primary schools has been undertaken but not with the same energy. However, the fact that music specialists may choose willingly to provide regular music education to pre-primary students in addition to their other primary school demands, warrants continuing and greater discussion.
The potential erosion of the daily informal, integrated learnings which may be incurred through music/drama/physical education specialists operating in pre-primary schools is a major concern of some early childhood educators. It is the view of some early childhood educators that teachers who are able to:

take advantage of a flexible, relatively open-ended programme are well situated to maximize opportunities to meet individual needs in their daily programmes. (McMahon, 1988b, p. 79).

The fear that specialist services in pre-primary schools could impinge upon the less rigid, individualistic, more open style of learning which is characteristic of early childhood settings and bring with it less intimacy, greater structure and discontinuity are not difficult to understand. A different type of learning exists in the early childhood years and it is perhaps this difference which pre-primary school teachers wish to protect.

Hoernemann (1988, p. 87) raises a concern of teachers of young children regarding decreased possibilities for integration if specialist services are welcomed in early childhood education. She mentions:

Music educators believe that the practice of using specialists...particularly in the early primary years, isolates the music programme from the students' other learning areas.

Although not specifically referring to pre-primary school education, the comment of Hoernemann may still be relevant.
Experience in early childhood education has shown that an integrated education programme for young children assists the formulation of child understandings. As Thackray (1974, p. 28) emphasizes:

Researchers...see musical ability and skills not as an isolated phenomenon but rather as part of a child's overall development...fit[s] in...towards integrating the different aspects of the curriculum and away from the treatment of different subjects separately.

He later elaborates:

to the child...there are no subject barriers, everything is related to everything else, it is all part of an exciting life, and music is just part of life.

Thackray's statements present the probable main catalyst behind early childhood educators' reservations concerning specialist operations in early childhood education - that being the demise of an integrated, open-ended approach to learning. The place and role of music specialists in pre-primary schools shall be discussed.
Results and Discussion

It was not unexpected to find that all pre-primary teachers were in charge of planning and presenting musical experiences to their students. The situation follows the traditional path of preschool/pre-primary organization in which the teacher exerted control of the experiences and instruction although admittedly other resource persons such as musicians from the community were involved to broaden the musical horizons of children. However, foremost responsibility lay with the teacher to plan and execute a suitable programme of music education.

Results showed that five teachers (23.8%) received the services of a primary music specialist—once every week for both morning and afternoon student groups in addition to the music sessions the teacher provided. One teacher (4.8%) worked with her aide to provide musical experiences on a daily basis. Teachers mentioned the utilization of fathers, husbands, friends, school groups and community musicians as personnel occasionally called upon to enrich and extend musical learnings and motivate child interest in musical performance, instruments and the profession. The teachers appeared to be willing to arrange visits from such resource people.

The table overleaf reveals the percentage of teachers satisfied with the music instructional arrangements in their pre-primary schools.
Table 28

Teachers Satisfied with their Music Instructional Arrangements

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<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>16 (76.2%)</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>5 (23.8%)</td>
</tr>
</tbody>
</table>

The results show that 16 teachers (76.2%) were satisfied with the situations which operated in their centres whilst five teachers (23.8%) were dissatisfied with their circumstances. It must be mentioned that all teachers with music specialists (five) stated they did not have qualms regarding the organization of music education provision. Two (9.5%) of the five teachers (23.8%) who reported dissatisfaction stated that a music specialist could ensure a continuum of sequential musical experiences which would form a bridge between pre-primary and Grade one experiences. It was anticipated by the teachers that an easier transition could be achieved for the students and that potential overlapping of musical materials would be minimized.

Three teachers (14.3%) argued in favour of music specialist allocation. They stipulated that a specialist would be able to add to the children's learning and extend their understandings. One teacher mentioned that "Somebody who is trained could take them a lot further."

Another teacher was angered that the full-time primary music specialist employed at the associated school refused to agree to
her request that she make attempts to involve herself in the
musical growth of the pre-primary children. She stated:

"We have a full-time music specialist in our school and
the pre-primary children are not allocated specialist
time...I know that our music specialist has great talent
which my children would enjoy and learn from."

The teacher obviously thought highly of the specialist's
abilities and wished for her students to benefit from the musical
talents of the specialist and the possibly more varied musical
experiences she could have presented to the children. The same
teacher later added:

"Although I enjoy music, I am unable to play a musical
instrument. I just feel that we have someone here who
knows so much, yet my children do not profit from her
expertise."

A second message was also being expressed by the teacher - that
her own limited background influenced her desire to be given access
to the music specialist.

It is acknowledged that pre-primary schools are part of
primary schools yet similar benefits are not always extended to the
centres. Not being offered the opportunity to benefit even
minimally from specialist services is but one example. Specialists
are employed to tackle the needs of years one to seven and the pre-
primary year is overlooked. The often hectic timetabling schedules
of music specialists may have contributed to the non-inclusion of
pre-primary schools in specialist responsibilities. As one teacher
argued: "The school has a music specialist but she doesn't have the time. The school is just too big."

Question 16a of the interview schedule was designed to gauge the support of pre-primary teachers for music specialist services in pre-primary schools. As can be noted in table 29 teachers overwhelmingly supported music specialist operations in pre-primary schools.

Table 29
Teacher Support for Music Specialist Operation in Pre-Primary Schools

<table>
<thead>
<tr>
<th>Music Specialist Operations</th>
<th>Number of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>For</td>
<td>20 (95.2%)</td>
</tr>
<tr>
<td>Against</td>
<td>1 ( 4.8%)</td>
</tr>
</tbody>
</table>

20 teachers (95.2%) advocated specialists for pre-primary children. One teacher (4.8%) believed that such services were unwarranted. That particular teacher referred to circumstances in her centre which made specialist provision undesirable. The fact that her students were involved in other activities within the primary school had some bearing on her decision to disagree with specialist inclusion. She commented:
"The children have got an Italian teacher and they've got to go to her. They also go to the library. Having a music specialist as well would be too disjointed for them."

This was the only teacher who mentioned the possibility of too many interruptions causing discontinuity - thus the specialist was considered an unnecessary inclusion in the teacher's pre-primary programme.

Table 30 lists other reasons for pre-primary teacher support of music specialist services in pre-primary schools.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Number of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Person/Advisor</td>
<td>9 (42.9%)</td>
</tr>
<tr>
<td>Benefits Children</td>
<td>4 (19.0%)</td>
</tr>
<tr>
<td>Provides Continuum/Bridge</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>Helps Teachers Not Confident</td>
<td>3 (14.3%)</td>
</tr>
</tbody>
</table>

Nine teachers (42.9%) referred to the potential use of a specialist as a resource person - one who could share ideas and knowledge with the pre-primary teacher. It was also mentioned by
the teachers that if specialists presented a music lesson each week in their centres that the teachers would be able to observe and learn from the specialist whilst he/she engaged the children in musical activity. Some teachers' comments included:

"I think the specialist would benefit the kids and the teacher too because we can follow along and learn as well."

"I think it's good to share different ideas. It's nice to see someone else do something different and gain a little bit more knowledge and ideas on different things the specialists do."

"I would like music specialist services even if it was only once a fortnight...just to highlight the finer points of music that the average person isn't aware of."

"The specialist is far more specific than my teaching. Mine is much more general and she deals with things more thoroughly than I would."

"Very often we're not trained in the finer points of music. The music specialist is."

A large percentage of the teachers therefore expressed the wish that specialists be available to act as music resource consultants. The specialists would be used to advise, model the presentation and organization of musical experiences, extend the children's musical learning and share ideas with the pre-primary teachers. The teachers requested that the specialists be involved with pre-primary students on a weekly or fortnightly basis to ensure that a liaison with the specialist be maintained. Music specialist provision could also be influenced by pre-primary school location in relation
to primary schools. The situation is revealed in table 31.

Table 31
Off-Site and On-Site Locations and Music Specialist Provision

<table>
<thead>
<tr>
<th>Locations and Specialist Provision</th>
<th>Centres</th>
<th>Overall Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off-Site and Music Specialist</td>
<td>0 (0%)</td>
<td>0%</td>
</tr>
<tr>
<td>Off-Site and No Music Specialist</td>
<td>7 (33.3%)</td>
<td>100%</td>
</tr>
<tr>
<td>On-Site and Music Specialist</td>
<td>5 (23.8%)</td>
<td>35.70%</td>
</tr>
<tr>
<td>On-Site and No Music Specialist</td>
<td>9 (42.9%)</td>
<td>64.30%</td>
</tr>
</tbody>
</table>

Two teachers raised concern regarding primary music specialist interaction in an early childhood environment. The teachers suggested that music specialists with early childhood qualifications would be better able to relate to young children and target their needs. They mentioned:

"Some specialists may not know the level of pre-primaries - they might be used to teaching Year seven's, or maybe they don't have that extra little bit of enthusiasm you need for teaching the little ones."

"I support the use of music specialists in pre-primary schools but I do have my reservations. It depends on the music specialist. She/he would have to be trained in early childhood in order to communicate to the children I think. I would not recommend a primary music specialist but a junior music specialist would understand."
Although possible damage to programme integration owing to specialist involvement was emphasized in the literature concerned, the concerns of teachers interviewed did not centre on that aspect of curriculum development. The recommendations that specialists be trained or have experience teaching in early childhood settings comprised the main cautions of teachers.

It was inferred that an early childhood music specialist (scarce as they may be) would interact more effectively with the pre-primary children and provide activities aimed at the appropriate level of student learning.

Of the five primary music specialists interviewed by the writer who operated in pre-primary schools, one specialist possessed early childhood qualifications. When questioned on the utilization of primary music specialists in pre-primary schools she mentioned the reservations of those teachers.

"I condone the use of music specialists in pre-primary schools if they're good. It would depend on what they were doing with the children. I suppose as I was trained as a teacher for the lower grades, it's not difficult for me to work with the pre-primary children. Some music specialists would find it hard...yes."

Although a lack of education or experience in the early childhood sphere could hamper the specialists ability to adjust to the demands of working with young children, a male Bachelor of Music graduate employed at several primary schools considered his experiences with pre-primary students to be positive and stated: "I have been providing music education in the pre-primary school
all year. I've been able to help the pre-primary teacher with her music."

The following table shows the educational and musical qualifications of the five music specialists who provided music education to pre-primary students on a once per week/fortnight basis in the centres surveyed.

Table 32
Educational and Musical Qualifications of Music Specialists

<table>
<thead>
<tr>
<th>Qualifications</th>
<th>Specialization</th>
<th>Tertiary Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma of Teaching E.C.E.</td>
<td>Music</td>
<td>1979</td>
</tr>
<tr>
<td>Diploma of Teaching/Cert.</td>
<td>-</td>
<td>1964</td>
</tr>
<tr>
<td>Bachelor of Music &amp; Education</td>
<td>Music (Composition)</td>
<td>1979 &amp; 1989</td>
</tr>
<tr>
<td>Diploma of Teaching &amp; Bachelor of Education</td>
<td>Music</td>
<td>1980 &amp; 1984</td>
</tr>
<tr>
<td>Diploma of Teaching</td>
<td>Music</td>
<td>1978</td>
</tr>
</tbody>
</table>

A primary music specialist who is at ease with young children and willing to interact and establish a friendly rapport could heighten a pre-primary teacher's confidence in that specialist's ability to relate to the children, acknowledge their musical needs and cater for them accordingly. Another music specialist commented that: "The more people involved with music and their life the better. You also have the contact with the children...and that's
what you want."

All specialists involved with pre-primary music education spoke favourably of their regular opportunities to contribute to the musical understanding of the children. All pre-primary teachers who received specialist provision confirmed that they were pleased with the arrangements and welcomed their continuation.

Table 30 indicates that four teachers (19%) believed their children would benefit from music specialist instruction. The teachers explained:

"It really is good for the children to hear somebody play the piano and do a lot of movement with the piano and that type of thing. I think they’re missing out if they don’t have some access or some exposure to musical instruments. There should be a music specialist in every school."

"I think a specialist could probably get more out of the children. It would benefit them."

"Having a specialist really does add to the children’s learning...she is able to teach things which I have trouble with."

"The specialist can offer the children a very good grounding...a good background. But we do much more fun music I would say."

The last comment highlighted another concern of some teachers. Although they supported music specialists in pre-primary schools the teachers indicated that perhaps the children could receive
greater musical enjoyment from their pre-primary teacher rather than a specialist who could be more interested in specific musical skills development and child response. Again it would depend on the specialist concerned - her programming intentions, expectations and teaching style. The argument concerning potential lessening of pleasurable musical experiences when presented by a specialist in early childhood settings could be an area worthy of more literature and discussion. The teachers were obviously anxious that specialist inclusion would interfere with the children's genuine enjoyment and anticipation. As Thackray (1974, p. 29) emphasizes:

there is a danger that a logical and systematic approach to the teaching of musical concepts if it is pressed too hard at the expense of other activities, may kill some of the joys of music for young children and be the innocent cause of unhealthy or even hostile attitudes to music arising at this early age.

That specialists could be prone to such undertakings would be another area for useful debate.

Three teachers (14.3%) suggested that a music specialist would assist the transition process of pre-primary students to Year One. Two teachers (9.5%) supported this potential advantage in question 15b. The view was based on the premise that familiarity with the specialist would ease the children's move to the Year One class. The specialist would be acquainted with the students, be knowledgeable of their individual musical needs, preferences and the types of musical experiences covered during their previous year at pre-primary school. The teachers discussed that music
specialist services in pre-primary schools would provide greater continuity and reduce the likelihood of activity overlapping in Year One.

Another three teachers (14.3%) mentioned that specialist utilization in pre-primary schools would assist those teachers not confident in their abilities to plan and present musical experiences for their students. Teachers' comments included:

"Each year I've been up to the music specialist. She has a different range of songs which I can do here. She's able to teach beat, playing instruments, which I have a lot of trouble with."

"I think it's a very good idea to have a music specialist if you don't have a teacher who's confident enough to do it herself. Often a lot of people aren't confident with music and they don't know where to start, and if you've got someone who knows what they're talking about, it helps a lot more."

It would be interesting to ascertain pre-primary teacher confidence in taking musical activities in their centres and compare the results to the level of teacher confidence for musical instruction in the lower primary school years. The situation was certainly expressed in the literature regarding the self-reliance of teachers to provide music education in their classroom.

Hoerrmann (1988, p. 87) refers to "a general lack of confidence felt by teachers about teaching music." She highlights "the fact that many of them [general classroom teachers] lack musical skills." Limited skills in music could explain low confidence
levels of some teachers when undertaking music education sessions. McMahon (1988b, p. 79) also comments on the "limited musical knowledge of many early childhood teachers." If the musical skills of teachers could be enhanced reservations concerning provision of music education may be lessened or could disappear. It was mentioned that nine (42.9%) of the 20 teachers who supported the involvement of music specialists in pre-primary schools, believed such specialists could provide valuable assistance in the planning and execution of music programmes. The role of the specialist as a resource person who could share ideas and give music lessons to the pre-primary children once per week or fortnight were issues raised by pre-primary teachers. If a teacher felt she required assistance for the organization and delivery of a music programme the specialist could then significantly contribute to helping her achieve programme outcomes. Underestimation of the teachers' own abilities to manage the musical needs of their students could also influence the decisions of teachers to welcome specialist intervention.

It is often taken for granted that music education is undertaken to a great extent in the pre-primary/preschool years in which formal and informal sessions are considered to be essential components of daily routines. It is also acknowledged that early childhood personnel are qualified to teach in years one, two and three in addition to preschool educational settings. If a music specialist is employed at a primary school, junior primary teachers receive specialist assistance and lesson presentation yet the pre-primary teacher is not obliged to be given similar
benefits regardless of the significant part played by music education in the overall programme.

The fact that some teachers mentioned they would appreciate the support of a music specialist even once fortnightly could reveal teacher concern for the possible quality of music education in their pre-primary schools. Specialist intervention and guidance could as Hookey's report (1990, p. 102) emphasizes, help teachers "learn ways to improve their music programme." This would be influenced by the willingness, confidence and ability of the music specialist to cater for the musical needs of pre-primary children.

Conclusions and Recommendations

Results showed that responsibility for the provision of music education in pre-primary schools continues to rest firmly with pre-primary teachers. Continuity and integration of programming experiences which are desirable components of any early childhood education may be more appropriately achieved and maintained by the pre-primary teacher.

Five teachers (23.8%) stated that music specialist services operated in their pre-primary schools in addition to the formal and informal musical experiences provided by the teachers. One teacher (4.8%) enlisted the assistance of her aide during musical activity.
It was somewhat disturbing that only one teacher mentioned her aide was employed to assist the provision of music education to students. Teacher aides can be utilized to perform purposeful tasks and music education activities are no exception. Such a small percentage score may indicate that teachers do not capitalize on the assistance in music which could be provided by aides. Perhaps the nine teachers (42.9%) who indicated insufficient room area for music and movement activities would not have viewed their circumstances to be so awkward if teacher aides were assisting them.

Teachers referred to the utilization of other external resource persons such as friends and child/adult musicians who visited their centres on an infrequent basis. They commented that a wide range of different experiences were valuable for the interest and motivation of children. As Almenud (1984, p. 8) highlights:

Children need to meet the artists, the people responsible for the artistic expressions. Individual artists visiting preschools can demonstrate ways of working and give staff and children alike an artistic incentive. Close collaboration between artist and pedagogue can help deepen a child's experiences... pass on wishes concerning content expressed by preschool staff.

15 teachers (76.2%) stipulated they were satisfied with the personnel who provided music education in their pre-primary schools. Five teachers (23.8%) however voiced their displeasures at not receiving music specialist services. They added that specialist operation could benefit their children's understandings and aid the development of a sequential continuum of musical learning experiences.
Although 20 teachers (95.2%) supported the use of music specialists in pre-primary schools for regular assistance and weekly lesson presentation, 16 teachers (76.2%) reported to be satisfied with arrangements which existed in their centres. This could indicate that even though music specialist provision in pre-primary schools was considered a positive move by teachers the adjustment might not be entirely necessary. This left four teachers (19%) with qualms regarding the allocation of music instruction responsibilities for pre-primary music education in their centres. Their dissatisfaction could have signalled a strong desire for assistance to be granted so that teacher anxieties could be somewhat reduced.

The 16 teachers (76.2%) who were satisfied with their circumstances but also extended support for specialist services did not reveal urgent needs for specialist provision although potential benefits such as the valuable resource and advisory roles the specialists could perform were highly rated. The teachers appeared to view specialist operation as a means by which they could receive greater confirmation that their plannings and lesson presentations were taking the most suitable paths. There could also exist possible teacher underestimation of their own abilities to prepare and execute music programme objectives.

Concerns were raised that primary music specialists would not be able to relate to pre-primary aged children nor target the appropriate learning levels of young children. Recommendations were forwarded by some teachers that the role of an early child-
hood music specialist be developed to cater specifically for the musical needs of young children and the queries of pre-primary teachers. Such a specialist would be cognisant of characteristics of early childhood practices and be able to advise teachers on techniques which would be considered most appropriate for meeting the needs of young children in the pre-primary and junior primary years. The teachers would have common links with the specialists.

The overwhelming support shown for the institution of music specialists in pre-primary schools revealed that their services would be welcomed in the centres. Their potential utilization as resource personnel - professionals with whom ideas could be interchanged and knowledge gained could indicate that perhaps teachers were unaware of other resource areas from which to acquire information or they anticipated the utilization of additional services which could possibly benefit the young students in their centres.

The results of a South Australian survey (Harkin, 1984, p. 8) which discusses music specialization options in primary school education, found it was the belief of some Principals that:

there are some subjects within the primary curriculum for which generalist teachers are poorly equipped, either by aptitude or training; specifically Art, Music.

The report continued to espouse the view of Principals: "For the sake of the quality of instruction, they [Art/Music] ought to be handled by specialist teachers." Although the report targeted primary school education the results could have
important implications for pre-primary education. If pre-primary teachers were not secure in their abilities to cater for the musical needs of their students then the utilization of a specialist to perform advisory functions for teachers could prove worthwhile.

Reynolds (1990, p. 52) discussed primary music education in the United Kingdom and the roles of music consultants and generalist teachers. Her paper highlighted:

Many primary school student teachers lack confidence in their ability to teach music. By developing the role of the music consultant we aim to build confidence and support generalists' work. This has positive implications for the attitudes of pupils as well as teachers.

Such a situation if considered desirable could be implemented in pre-primary schools. The music specialist would provide an advisory service to the teacher and regularly model music sessions. It would also be anticipated that the specialist would present more varied musical interactions (instruments, different learning mediums). Whether the fact would occur is of course another question. One teacher outlined that having access to music specialist services could heighten teacher confidence and thus encourage them to not avoid incorporating music education into their daily routines. (Time allocation for music shall be covered in a following section). Hookey (1990, p. 102) in a Canadian report, referred to the potential of consultation and peer coaching in elementary music education as a means of helping classroom teachers develop musical appreciation, skills and knowledge and also ways to improve their music programmes.
A recommendation of this study would be that pre-primary teachers be offered through negotiation, the inclusion of their students in specialist responsibilities (once per week/fortnight). The teacher would not be obliged to accept specialist intervention if she did not deem it necessary. However, she would at least be given the opportunity to make the decision for or against specialist provision in view of the potential gains which could be achieved for herself and her students. As one teacher argued:

"If a specialist is at the primary school, it seems a real pity that you can't take advantage of the person's training and expertise."

Summary of Findings

6.1. All pre-primary teachers stated they were in charge of planning and presenting musical experiences to their students.

6.2. 23.8% of teachers received the services of a primary music specialist in addition to the music sessions provided by the teachers.

6.3. Only one teacher mentioned working with her aide to present musical experiences which could suggest aide under-utilization for activities such as music.

6.4. 76.2% of teachers were satisfied with the situations which operated in their centres. 23.8% were dissatisfied with their circumstances.
6.5. Those teachers with music specialists stated they did not have qualms regarding the organization of music education provision.

6.6. Teachers overwhelmingly supported the institution of music specialists in pre-primary schools. 95.2% advocated specialists for pre-primary children.

6.7. 42.9% of teachers referred to the potential use of specialists as resource persons who could share ideas and knowledge with pre-primary teachers - to act as research consultants.

6.8. 19% believed specialists would benefit the children; 14.3% highlighted that specialists could provide a continuum of musical knowledge and assist transition to Year One. Another 14.3% stated that the availability of specialists could help teachers not confident in planning and presenting musical experiences.

6.9. 9.5% of teachers raised concern regarding primary music specialist intervention in an early childhood environment. It was mentioned that pre-primary teachers provide more musical enjoyment than specialists. It was also suggested that specialists with early childhood qualifications would be better able to relate to young children, and target their needs. Possible damage to programme integration covered in the literature was not commented upon by teachers.
6.10. Music specialist provision could be influenced by pre-primary school location in relation to primary schools – all centres with specialists were on-site locations.

6.11. Of the five music specialists who operated in the surveyed pre-primary schools, one specialist was early childhood educated. All specialists involved with pre-primary music education spoke favourably of their regular opportunities to contribute to the musical understandings of the children.

6.12. Pre-primary teachers are not obliged to be given music specialist services as is evident in the primary years regardless of the significant part played by music education in the overall pre-primary programme.

6.13. Some teachers mentioned they would appreciate music specialist services even once fortnightly which could reveal teacher concern for the possible quality of music education in their pre-primary schools and the desire of some teachers to be supported in their musical endeavours, whilst increasing their awareness of other resource areas from which to acquire assistance.
CHAPTER VII

D. TIME ALLOCATION

7.0. Time Allocation for Music Education in Pre-Primary Schools

Introduction

McMahon (1988a, p. 1) stresses that "In early learning, education is a gestalt process, not one of isolated bits and pieces." Integrated learning can provide rich experiences in which:

Application of knowledge and skills acquired in one discipline/curriculum area lends a wider perspective to and strengthens underlying relationships when applied in other discipline/curriculum areas. (McMahon, p. 1).

Integrated programmes may assist the child's establishment of links between the different learning areas. In music education, language and communication skills may be emphasized; in language arts, mathematical concepts may be treated. The children's daily interactions consist of continual quests for knowledge and understandings - their understandings being nurtured as they participate in experiences which can be given added meaning through the process of integration.

Bridges (1980, p. 33) reminds that "Music is not a subject which can be taught once a week." Music affords many experiences which ideally can be used to permeate an entire early childhood
programme and in turn provide enjoyment and support the learnings of young children. Its ability to enhance the emotional securities of children asks that its valuable role in contributing to the overall development of children be recognized by all teachers. As Forrai (1988, p. 14) states: "Music education...influences the child's general development [and has a] complex effect on the emotions." One teacher involved in the study, confirmed music to be a necessary on-going part of her children's experiences when she mentioned:

"Music is an integral part of the pre-primary programme. It assists the teaching and development of language skills, confidence and maths. It really is important.

The importance of providing formal musical interactions in addition to frequent informal activities as part of the daily routines of young children was referred to by Jalongo and Collins (1985, p. 20). They comment that "Planned and spontaneous music sessions are both part of a good curriculum for young children." The formal session allows specific musical skills to be introduced, practised and extended. A skilful teacher can link the content of planned musical activities to other learning areas - thus the integration of ideas may heighten meaning and understanding.

The Western Australian syllabus "Music in Schools K-3" (1980, p. 26) recommends that 15-20 minutes musical experience be provided each day for children in the early primary years. It added that many pre-primary teachers and children "enjoy a
regular music spot everyday" (p. 26). The pre-primary environment offers teachers daily opportunities to organize planned and informal musical interactions. The flexibility of the timetable and the general arrangement of the centres can invite both formal and informal learning activities to be readily accommodated. It also gives the teacher "many additional opportunities to work with the children...in ways rarely possible in Year One" (p. 26).

In the case of musical experiences, informal situations may permit the application of knowledge gained in the more structured activities to be further explored and expanded as the child undertakes spontaneous interaction with the musical environment planned by the teacher. Of course the extent to which informal activities can be exploited largely depends on the availability of instruments and resources to stimulate and allow active music-making. (It has already been discussed in a previous section how the unavailability of instruments and resources can limit the opportunities for young children to experience informal musical interactions. The recommendation was made that music corners allowing informal activity be established in pre-primary schools to cater for personal and relaxed musical experiences to complement the structured, whole group sessions directed by the teacher).

Zimmerman (cited in McMahon, 1986b, p. 163) refers to both informal and formal musical learning situations when she states the:
The music curriculum should pivot on the child's awareness and creation of musical sounds. ... As the child interacts with sounds through movement, socializing and experimenting, he should be guided in making decisions concerning their timbre, intensity, pitch and duration.

It is during informal activity that the child is presented the opportunity to explore and experiment - to play instruments, sing, move and create spontaneously. The structured session can provide children with questions about such areas as timbre and pitch and alert them to musical possibilities of which more can be learned and discovered in informal situations - thus the teacher advises and guides her students as they engage in spontaneous musical responses which the informal situation encourages. As Kodaly (cited in Szonyi, 1973, p. 15) emphasizes: "Active participation in music-making is by far the best way to get to know music."

McMahon (1988b, p. 79) refers to "the lack of regular and sequential experiences" in early childhood musical experiences. It is the aim of this section to find the extent to which music education was undertaken in the pre-primary schools of the surveyed teachers.
Results and Discussion

The table below reveals the frequency of structured musical activity provision in the pre-primary schools.

Table 33

Frequency of Structured Activity in Pre-Primary Schools Per Week

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyday</td>
<td>15 (71.4%)</td>
</tr>
<tr>
<td>3 - 4 Times</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>2 - 3 Times</td>
<td>1 (4.8%)</td>
</tr>
<tr>
<td>Once</td>
<td>4 (19.0%)</td>
</tr>
<tr>
<td>None</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

It is evident that a majority of teachers (15 - 71.4%) ensured that students received a planned musical experience everyday, be they provided by the pre-primary teacher and/or music specialist (at the most once per week). This was not to be unexpected although it was somewhat disturbing to discover that not all pre-primary teachers provided music every day to their students in the form of a planned session.

One teacher (4.8%) organized three to four sessions each week whilst another teacher (4.8%) presented two or three lessons
each week. Four teachers (19%) revealed that they prepared one music session for students each week. All 21 teachers provided at least one planned session every week.

An interesting arrangement appeared to be in progress at one pre-primary school, in which the students were in receipt of five planned sessions each week. On the day the music specialist operated in the centre, the teacher would present her own lesson to her students in addition to the specialist's contribution. Her dedication was apparent. She mentioned: "We have a 10 to 20 minute planned lesson each day and twice on one day because they go to the music specialist. They enjoy it."

A link could possibly be established between that teacher's view of the importance of music education in the education of young children and the frequency of structured music lesson provision per week. The teacher believed music education to be worthy of the highest rating (ten). The significance she placed on the value of music in the curriculum was obviously reflected in the large proportion of time set aside for music instruction in her daily timetable. However, as can be realized from table 34, a relationship between the considered high importance of music education and its corresponding daily inclusion in an early childhood programme was not always evident. (Refer to table overleaf).

It can be noted that those teachers with very high opinions of music education undertook formal music sessions each day (or
indeed more, as was discussed earlier). Pre-primary teachers who gave music a "nine" rating also ensured that everyday planned experiences were a necessary component of music education provision for their students. It was obvious however that as teachers proceeded to give lesser ratings, inconsistency in the daily provision of music lessons occurred. Three teachers (14.3%) who rated music education to be worthy of a rating of "eight" prepared music lessons each day whilst the other teachers (14.3%) provided formal sessions once per week. A noticeable contrast therefore existed in that identical ratings from teachers did not indicate similar provision for music instruction.

Table 34
Music Education Ratings Versus Frequency of Musical Activity Per Week

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Rating</th>
<th>Everyday</th>
<th>3-4 Times</th>
<th>2-3 Times</th>
<th>Once</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>10</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The rating of "seven" by teachers also revealed variable organization of everyday formal musical experiences. Four of
those teachers (19%) arranged planned sessions to be part of the daily routines of children whilst the remaining teachers provided music lessons from one to three times per week. Two teachers (9.5%) who indicated that they considered music education to be worthy of a rating of "six" somewhat unexpectedly stated that they presented daily music sessions to students. The teacher (4.8%) who supplied a rating of "five" organized formal music sessions twice weekly.

It appeared that teachers who viewed music education to be highly important for young children ("nines/tens") ensured that provision of daily formal sessions be undertaken. As teachers' opinions of music education decreased so too did consistent organization of planned musical experiences. However, no set pattern could be detected regarding teacher viewpoints of the importance of music education and their subsequent provision for music instruction. It is however possible that teachers who firmly believed music education to be relevant in the lives of young children were supportive of its daily inclusion in the routine timetabling of pre-primary teachers. (This was also shown by the teacher whose students received five music sessions per week).

Table 35 (overleaf) indicates the duration of planned music sessions in the pre-primary schools of the surveyed teachers. Results show that musical experiences of 16-20 minutes were commonly undertaken by the teachers with ten teachers (47.6%) considering that to be a suitable amount of time to cater for the musical needs of their students. Eight teachers (38.1%) allowed
a span of 11-15 minutes, the time allocation recommended by the Western Australian syllabus "Music in Schools K-3". Two teachers (9.5%) allotted five to ten minute music sessions during the week. A 21-30 minutes time allocation for planned music instruction was provided by one teacher (4.8%).

Table 35

**Durations of Structured Music Activity in Pre-Primary Schools**

<table>
<thead>
<tr>
<th>Duration</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 - 10 mins</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>11 - 15 mins</td>
<td>8 (38.1%)</td>
</tr>
<tr>
<td>16 - 20 mins</td>
<td>10 (47.6%)</td>
</tr>
<tr>
<td>21 - 30 mins</td>
<td>1 (4.8%)</td>
</tr>
</tbody>
</table>

Teachers provided explanations for their decisions to choose specific time allocations for formal musical activity. The 16-20 minute duration proved popular with teachers:

"I have an actual music session of about 20 minutes when we teach the skills and games. I have that time to focus on a different skill everyday. One day we might do movement and music. Sometimes we do things on the board with melodic shapes - high and low and different pitch. Instruments get used and we might do a sort of formal dance."
"I try to do about 20 minutes a day but it does vary. It depends on whether you're running out of time, or need to fill in time or if they've got some energy they need to run off outside. But they love music. Sometimes they'll want a singing game and this takes ten times longer than a song. So the things they choose often determine how long the music session will be."

The first teacher suggested that she required a 16-20 minute timeslot in order to cover a particular skill emphasized in each lesson. Attention to specific skill development was obviously an integral part of her programming for music. The need for flexibility during formal presentations was highlighted by the second teacher. Children requested certain activities which influenced the structure and composition of planned experiences. Time constraints also had a bearing on the extent to which music was provided daily.

Although 16-20 minute spans were supported by ten teachers (47.6%) three of those teachers (14.3%) acknowledged that continual adherence to such a stipulated time frame was not always possible due to other factors which included the children's mood, incidental experiences which encroached upon time availability and the activity ideas proposed by students which contributed to lengthened overall times for music lessons. A need to accommodate interruptions which often altered the amount of time originally planned for musical experiences was recognized by those teachers.

The eight teachers (38.1%) who provided music sessions of 11-15 minutes also elaborated upon their decisions:
"I have 11-15 minutes a day because we do a lot of movement and music. It takes a while to organize them and do it."

"We do about 10-15 minutes a day...sometimes more, sometimes less. It depends on what topic I'm covering, what theme it is and what we're doing. If we play instruments it takes longer than if we're just singing a few songs. If we play a singing game it's different. But on average it's about 10-15 minutes each day."

"We mostly do 15 minutes a day but if we play a singing game like 'Kangaroo' it takes a long time if kids say 'I haven't had a turn.' It does take a while but the kids enjoy it and that's the main thing."

The content of planned experiences was viewed by teachers to be responsible for the amount of time allocated to music education. One teacher undertook regular movement activities and therefore organized her schedule accordingly - just as the teacher with 16-20 minutes of music each day saw it necessary to set aside that time in order to cater for the development of musical skills on which she placed great emphasis. The influence of thematic learning in the programmes of some teachers had a bearing on the duration of music lessons presented by those teachers. The songs/activities available to complement their themes and the children's responses to those themes (positive or negative) could possibly extend the 11-15 minutes afforded to music in the daily routine or indeed lessen the duration. The use of instruments or singing games were also factors which would determine the amount of time allocated for music instruction.
Music sessions of five to ten minutes were prepared by two teachers (9.5%) who both were concerned for the concentration spans of children. One teacher commented:

"Our music lessons go for five to ten minutes because the children's listening skills are not very good. It depends on whether it is a movement session or not."

The population of this teacher's class included many students who enjoyed gross motor musical activity but were not able to concentrate for longer periods during activities such as singing or appreciative listening. Therefore the teacher arranged shortened music lessons so that the attention spans of the children would be maintained.

As the research component of this project was undertaken during the latter stages of the year the need to increase the attention abilities of children becomes even more pronounced so that they may be better able to meet the extra concentration demands of Year One. The second teacher added to the discussion:

"I usually do about five to ten minutes of music. Sometimes I do more but their concentration span doesn't go much further than 15 minutes anyway. It would go longer but it's taken for granted that 15 or even 20 minutes is the absolute maximum."

The teacher realized that her students would cope with extended music sessions yet kept to the barest minimum. Instead of testing the potential of her students to maintain their concentration by increasing the amount of time allocated to music
instruction she proposed that to proceed further than 15 or 20 minutes was not considered a desirable practice in early childhood education. Obviously if children enjoy an experience there is a likelihood that their concentration to maintain involvement in the experience will be increased. For children to develop longer attention abilities requires practice and motivation - the teacher to gauge the abilities of her students and proceed from that point. The teacher recognized her students could successfully engage in longer activities but refrained from further exploring their potentials because "it's taken for granted that 15 or even 20 minutes is the absolute maximum."

Children's exposure to music was usually in the form of formal experiences. Only three pre-primary teachers (14.3%) who provided music everyday to students also permitted informal interactions in addition to their formal experiences.

Four teachers (19%) with permanent music corners allowed their students spontaneous exploration of their personal music-making desires. The significance of a music corner can be increased if one refers to the once per week provision of music education in three pre-primary schools (14.3%). The presence of occasional music corners in the three centres could serve compensatory purposes in which their existence counter-balances to some extent the students' restricted opportunities to engage in directed music-making. The music corner however does not replace the valuable role of the planned music session which is a major contribution to the overall musical development of young children. Both formal and informal musical experiences may act as complement-
ary forces which enhance skill and creative development.

In a survey by Anderson (1981, p. 10) it was found that "teachers did not feel that daily planned music instruction of kindergarten children has a high priority to warrant daily planned activities." Anderson later ascertained that the teachers "seemed to prefer the more random and spontaneous type of music instruction for their particular classes as a matter of expediency." It cannot be stated that teachers who prepared one lesson per week actually did so because they did not consider music instruction to be a significantly worthwhile undertaking. (Although of the four teachers, three gave ratings of "eight" and one of "seven" for the importance of music education in the education of young children). Anderson's survey may reveal possible reasons for the decisions of some teachers to neglect the preparation of planned musical experiences in favour of incidental experiences, informal music corner interactions, a reliance on music specialist operations or a total disregard for the inclusion of music as a worthwhile early childhood experience.

It is interesting to note that varied provision for music education was evident in the centres where music specialists operated. The teacher who formally taught music each day even though the specialist also presented one lesson per week in her centre contrasted greatly to the organization of music provision in two other pre-primary schools which benefited from specialist services.
It was found that in one centre a planned once a week musical experience of 11-15 minutes was undertaken not by the pre-primary teacher but a music specialist. An occasional music corner provided some additional musical interactions in informal situations at specific times during the year although the children were not always assured of music corner utilization as the room space was often used for the co-ordination of puppet theatre or home corner extensions. Therefore apart from infrequent informal interactions with small groups of children at different stages during the school year the teacher's contact with her students in a musical capacity was limited. The teacher did not mention the use of incidental musical experiences (music for transition, motivation, lesson introduction). Nevertheless it is presumed that the teacher would have included some incidental experience even of a brief nature.

The second centre also received music specialist services in which the specialist provided a 16-20 minute music lesson in the pre-primary school once a week. The seriousness of the situation can be highlighted when one realizes that informal music-making opportunities (in the form of music corner accessibility to students) were not available. One could then expect that other types of incidental musical experience (for example, spontaneous singing, transition music) would be capitalized upon by the teacher. This unfortunately was not the case. The teacher stated:

"Music isn't actually taught here apart from the specialist. We might sing a few songs sometimes... but on Wednesdays they have a whole half hour at the school with the music specialist. That's the main one."
An over-reliance on the music specialist to the exclusion of other important musical experiences could be suggested of the teacher who believed that a once per week interaction with the music specialist would sufficiently satisfy the musical needs of her students. The informal component of a music programme which may assist the development of children's creative abilities was not part of the day to day musical experiences of the teacher's students. Incidental experiences also appeared to be lacking. The dependency of both teachers on music specialist contributions was perhaps best summed up by the first teacher. She mentioned:

"I don't do formal music sessions very often. In fact, I don't do them at all now I've got a music specialist. Sometimes we do things incidentally like sing songs or introduce a new song."

Instead of undertaking all necessary options to ensure that they complemented the specialists' work with their children, the teachers used the benefit of the music specialist to reduce the amount of time they would have to allot to their own preparation of musical experiences. However those attitudes contrasted with the views of three pre-primary teachers (14.3%) who received music specialist lessons once per week. The teachers desired that daily formal musical experiences be available for their children. All children participated in planned activities each day (at least once per day, with some more than once); two of those teachers (9.5%) permitted informal use of occasional music corners to cater for the individual expressive needs of young children. Three pre-primary schools (14.3%) with music specialists arranged 11-15
minute planned sessions. The remaining two centres (9.5%) held 16-20 minute formal lessons. The influences of specialist provision in pre-primary schools on the musical activity undertakings of pre-primary teachers could prove itself to be an interesting and potentially controversial topic for further research.

Conclusions and Recommendations

Results from the interviews showed that a majority of teachers (16 - 76.1%) provided formal musical experiences each day for pre-primary children. Six of those teachers (28.6%) also utilized occasional/permanent music corners to meet the informal, exploratory interests of their children.

In four other pre-primary schools circumstances differed greatly in which weekly music sessions were organized by the teachers. The timetabling of more planned sessions was not considered necessary by those teachers although the availability of occasional music corners for informal interactions were offered by three teachers (14.3%). The occasional existence of music corners could compensate somewhat for the lack of formal music sessions but can not be considered a substitute for the teacher-directed, planned experience in which specific musical skills may be introduced, practised, extended and monitored in the company and security of other children.

Great variations were noted in the durations of musical
experiences organized by teachers. Many teachers revealed a willingness to timetable flexibly for music instruction. Teachers raised concerns that the children's "short" concentration spans influenced the durations of their music lessons. One teacher arranged five to ten minute musical activities because she believed it to be uncommon or inappropriate for such experiences to last longer than 15-20 minutes although she knew that her children's concentration spans "would go longer."

Thackray (1974, p. 36) in results from his research discovered that young children:

could listen for considerable periods...there were times when a session lasted as long as an hour without any signs of lack of concentration...there was continuous concentration of attention - even through periods of comparative inactivity.

It could be that early childhood educators underestimate the ability of young children to concentrate for extended periods of time. Certainly a teacher's five to ten minute provision for music education (previously highlighted) contrasted markedly to a situation established by a pre-primary teacher in another centre. In that case a 21-30 minute music lesson was presented each day to students by the teacher. The teacher elaborated that:

"Mostly we do around 25 minutes but it just depends on what we're doing...instruments, movement, rhythm things. Sometimes we do up to 35 or 40 minutes. It depends on them."
The teacher highlighted her flexibility. If the children were engrossed in an activity the finishing time would be ignored so that the children's enjoyment could be continued. Flexibility also emphasizes that activities not achieving the desired intentions be adjusted or an alternative undertaken.

The ability of the teacher to ensure that musical experiences are pleasurable, varied and absorbing could also have some bearing on the amount of time teachers may be willing to allocate for music sessions. A teacher whose children thoroughly enjoy the musical experiences she prepares could be more likely to set aside a somewhat lengthier time period for music, confident that her children would probably be receptive for the duration of time undertaken.

An attempt to establish a link between the teacher's views of the importance of music education in the education of young children and the corresponding number of formal music lessons they provided per week proved to be inconsistent (as can be noted in table 34). Nevertheless it was noticeable that teachers who were fixed in their high opinions of music education (6 - 28.6%) also ensured that daily provision of music instruction was a major part of the musical contributions they extended to their children. The remaining ratings displayed such variability when linked to the teachers' allocation of music per week that no significant patterns were discernible.

It was noted that marked differences were apparent in the
provision of music instruction in centres with music specialists. In the first case the teacher ensured that planned musical experiences were part of the children's daily education. On the day the music specialist operated the teacher would still present her prepared lesson - the children received five music lessons per week although no informal activity was available. Spontaneous music-making was not a part of the children's activities. Two other teachers with specialists (9.5%) continued to provide formal sessions each day except on the days when the specialists operated in the centres. Durations of 11-15 minutes were utilized and occasional music corners operated.

Two specialists were given responsibility for the music education of students by teachers in two other centres. All formal musical activity was undertaken by the specialists concerned in which the teachers did not plan complementary support activities but rather used minimal incidental experience where they deemed it appropriate. One of the teachers organized an occasional music corner to cater for informal needs on an infrequent basis. The second teacher did not allow spontaneous activity - the once a week planned music session of the music specialist being the musical interaction available to the children.

McMahon (1986b, p. 163) highlights the importance of informal music-making when she states:

To maximize the development of abilities with which we are born, our environment must provide opportunities for ...young children to...create their own sounds with voices, bodies and other acoustic instruments...share the musical experience in an environment responsive to the nuances of individual perception and exploration.
Non-specialist teachers have the opportunity to learn from the specialist and extend material/skills the specialist covers with the children, and to liaise and utilize the support available to plan and execute regular and sequential musical experiences (a lack of such experiences was an important factor raised earlier by McMahon, 1988b, p. 79). However the onus is placed on the teacher to balance formal, informal, incidental and specialist musical experiences so that children are given opportunities to engage in guided, personal, integrated and varied musical activities. That a non-specialist teacher be present during music lessons given by a specialist is important because it provides her with content and skills which she could reinforce with her children.

The amount of time planned for formal musical activity may also be largely dependent on the teacher's personal views of adequacy and expectations and her enthusiasm and initiative. Perhaps if more teachers were aware of their ability to contribute in a major way to the musical enrichment of the students in their centres, the regularity and variation of musical activity could be enhanced.

If teachers were reminded of "the obvious benefits to young children of regular opportunity to engage in musical activity which is regarded as the norm in other subjects" as Kemp and Freeman acknowledge (cited in McMahon, 1988b, p. 82), then the significant role of music education in early childhood education could receive greater recognition and be consistently reflected in the timetables of pre-primary teachers.
Summary of Findings

7.1. A majority of teachers (71.4%) ensured that students received a planned musical experience every day. All 21 teachers provided at least one planned session every week.

7.2. 19% of teachers specifically provided music education once per week.

7.3. A relationship was not always evident between the considered high importance of music education and its corresponding daily inclusion in an early childhood programme (the assumption being that a high rating for the importance of music education would correspond with frequent allocation of music sessions). Identical ratings by teachers did not indicate similar provision for music instruction.

7.4. Musical experiences of 16-20 minutes were undertaken by 47.6% of teachers. 38.8% allowed a span of 11-15 minutes.

7.5. Children's exposure to music was usually in the form of formal experiences. Only 14.3% of teachers who provided music every day to students also permitted informal interactions in addition to their formal experiences.

7.6. Many teachers were willing to timetable flexibly for music instruction. (That is, extend sessions being enjoyed).
7.7. In some classrooms, music corners served compensatory functions in which their existence could counter-balance to some extent a student's restricted opportunities to engage in formal music-making.

7.8. Varied provision for music education was evident in the centres where music specialists operated. For example, the teacher who formally taught music each day even though the specialist also presented one lesson per week in her centre, contrasted greatly to the organization of music provision in two other centres in which the only music teaching was from specialists, once per week.

7.9. The influences of music specialist provision in pre-primary schools on the musical activity undertakings of pre-primary teachers could be a topic for further research.
REFERENCES


Education Department of Western Australia. (1980). Music in schools K-3 (Stage One). Perth: Education Department of Western Australia.


The Western Australian College of Advanced Education. WACAE Undergraduate Handbooks (1978-1990). Perth: Western Australian College of Advanced Education.


APPENDIX:  A

Interview Schedule:

a) Pre-Primary Teacher
PRE-PRIMARY TEACHER

This interview schedule is designed to obtain information and opinions of pre-primary teachers concerning the adequacy of facilities for music education in selected Perth pre-primary schools. Information regarding professional training and music teaching procedures may assist in identifying issues concerning provision of resources for music. Your co-operation in this matter is appreciated.

All responses will be treated confidentially.

Please tick on the appropriate line, or write your answers on the lines indicated.

Teacher Information

1. Sex M ___ F ___

2. Age Range
   20 - 25 years ___
   26 - 30 years ___
   31 - 35 years ___
   36 - 40 years ___
   41 - 45 years ___
   46 - 50 years ___
   51 - 55 years ___
   56 - 60 years ___

3. Indicate the number of years you have taught in pre-primary schools.
   Less than 5 years ___
   5 - 10 years ___
   11 - 15 years ___
   16 - 20 years ___
   21 + years ___
4. Indicate your years of experience as a teacher.

   - Less than 5 years    
   - 5 - 10 years        
   - 11 - 15 years       
   - 16 - 20 years       
   - 21 + years          

5. What are your highest teaching qualifications?

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Institution</th>
<th>Area of specialization</th>
<th>Year of completion</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tr>
</tbody>
</table>

6a. Did you complete any music or music education units offered during your teacher education course?

   Yes    No    

b. If Yes, how many units did you complete? (i) Music  (ii) Music Education

   (i) Music          (ii) Music Education

   Yes    No    

c. Briefly describe the content of each unit.

   1.                                                                                         
   2.                                                                                         
   3.                                                                                         
   4.                                                                                         
   5.                                                                                         
   6.                                                                                         

7a. Were the music or music education units you completed during your training adequate in preparing you for teaching music in pre-primary schools? Yes    No    

b. Please state your reasons.  

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

   c18
8a. Have you had any formal vocal training? Yes __  No __ c20
   b. If Yes, how many years of formal training did you have? __ c21

9a. Do you currently play any musical instruments?
   Yes __  No __ c22
   b. If yes, please specify which and your years of formal training.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Formal Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1. ______ years</td>
</tr>
<tr>
<td>2.</td>
<td>2. ______ years</td>
</tr>
<tr>
<td>3.</td>
<td>3. ______ years</td>
</tr>
</tbody>
</table>

10a. Do you use any of the above instruments when teaching music?
   Yes __  No __ c26
   b. Which instruments do you use? Frequency of use per week.

   a. ___________________________ ___________________________ c27
   b. ___________________________ ___________________________ c28
   c. ___________________________ ___________________________ c29
   d. ___________________________ ___________________________ c30

11a. Have you attended any music courses/workshops in the past two years?
   Yes __  No __ c31
   b. If Yes, describe the:

   Topic of workshop ___________________________________________
   ___________________________________________________________ c32
   Length of workshop ___________________________________________
   ___________________________________________________________ c33

Classroom Music

12. Is the pre-primary school in which you teach, an on-site or off-site location? on-site ____ off-site ____ c34
13. On a rating scale of 1 - 10 (1 being the least important), how important do you consider music education to be in the education of young children? (Please circle)

1 2 3 4 5 6 7 8 9 10 c35

14. Who is responsible for music instruction in your pre-primary school?

Self ______________________ c36
Music Specialist _____________ c37
Other (specify) ____________________________ c38

15a. Are you satisfied with such an arrangement?

Yes ____ No ____ c39

b. If No, give reasons ____________________________

________________________________________

________________________________________

________________________________________ c40

16a. Do you support the use of music specialists in pre-primary schools?

Yes ____ No ____ c41

b. Please state your reasons ____________________________

________________________________________

________________________________________

________________________________________ c42
17a. How often is music taught in the pre-primary school per week?

Not at all ______
Once ______
Twice ______
Three times ______
Four times ______
Five times ______
Other (Please specify) ______________________________________

b. What is the average duration of a music session?

5 - 10 mins ______
11 - 15 mins ______
16 - 20 mins ______
21 - 25 mins ______
26 - 30 mins ______
Other ______

Resources and Facilities

18a. Does the pre-primary school have a music corner?

Yes _____ No _____ c45

b. Are the students allowed informal use of the music corner?

Yes _____ No _____ c46
19. State those instruments available in your pre-primary school and indicate the frequency of their usage by students.

<table>
<thead>
<tr>
<th>Tuned Instruments</th>
<th>Frequency of usage per week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Everyday</td>
</tr>
<tr>
<td>Piano</td>
<td></td>
</tr>
<tr>
<td>Autoharp</td>
<td></td>
</tr>
<tr>
<td>Xylophone</td>
<td></td>
</tr>
<tr>
<td>Glockenspiel</td>
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</tr>
<tr>
<td>Metallophone</td>
<td></td>
</tr>
<tr>
<td>Chime Bars</td>
<td></td>
</tr>
<tr>
<td>Tunable Timpani</td>
<td></td>
</tr>
<tr>
<td>Tambour</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Non-Tuned Instruments</th>
<th>Frequency of usage per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tambourines</td>
<td></td>
</tr>
<tr>
<td>Cymbals</td>
<td></td>
</tr>
<tr>
<td>Finger Cymbals</td>
<td></td>
</tr>
<tr>
<td>Drums</td>
<td></td>
</tr>
<tr>
<td>Castanets</td>
<td></td>
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<tr>
<td>Maracas</td>
<td></td>
</tr>
<tr>
<td>Bells</td>
<td></td>
</tr>
<tr>
<td>Woodblocks</td>
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<tr>
<td>Sandblocks</td>
<td></td>
</tr>
<tr>
<td>Triangles</td>
<td></td>
</tr>
</tbody>
</table>
20a. Do you feel the available instruments are adequate for the musical activities in the pre-primary school?

Yes ____ No ____ c74

b. If No, list those instruments you would like to have.

___________ c75 ___________ c76 ___________ c77
___________ c78 ___________ c79 ___________ c80
___________ c81 ___________ c82 ___________ c83

21. List other types of equipment you use for music lessons (records, tape recorders etc.).

___________ c84 ___________ c85 ___________ c86
___________ c87 ___________ c88 ___________ c89

22. Does your pre-primary school have exclusive use of the music equipment?

Yes ____ No ____ c90

23a. Are the instruments readily accessible? Yes ____ No ____ c91

b. If No, from where are they borrowed? _____________

___________ _____________ _____________ _____________ _____________ c92

24a. Are the musical instruments and other music equipment you use in the pre-primary school in good condition?

Yes ____ No ____ c93
b. If No, indicate particular areas of concern. 


c94

25a. Is adequate space available for music instruction?

   Yes ___  No ___

c95

b. If No, please elaborate on perceived inadequacies (eg. confined areas, lack of special room facilities etc.).


c96

26a. From where do you usually go to seek information concerning:

   1. Music instructional matters/methodologies


c97

   2. Music resources/aids


c98

   3. Music reference materials


c99

b. Of those mentioned, indicate where your needs are not being met.


c100

27. Briefly indicate the improvements (if any) you would like to see in early childhood music education in Western Australia.


c101
APPENDIX: B

Interview Schedule:

b) Music Specialist
MUSIC SPECIALIST

This interview schedule is designed to obtain the opinions of music specialists concerning the adequacy of facilities for music education in selected Perth pre-primary schools. Information regarding training and music teaching procedures may assist in identifying issues concerning provision for music. Your co-operation in this matter is most appreciated.

All responses will be treated confidentially.

Please tick on the appropriate line, or write your answers on the lines indicated.

Coding Only

1. Sex M ____ F ____

2. Age range 20 - 25 years ____
   26 - 30 years ____
   31 - 35 years ____
   36 - 40 years ____
   41 - 45 years ____
   46 - 50 years ____
   51 - 55 years ____
   56 - 60 years ____

3. Indicate the number of years you have taught as a music specialist.
   Less than 2 years ____
   3 - 5 years ____
   6 - 8 years ____
   9 - 11 years ____
   12 - 14 years ____
   14 + years ____
4. Indicate your years of experience as a regular classroom teacher.

Less than 5 years ____
5 - 10 years ____
11 - 15 years ____
16 - 20 years ____
21 - 25 years ____
26 + years ____

5. Please provide a description of your qualifications.

Qualification ____________________________
Institution ______________________________
Area of specialization ______________________
Year of completion ________________________

6. Describe any other completed music studies, private and/or those obtained from any institutions, societies.

________________________________________
________________________________________
________________________________________

7a. Were the music or music education units you completed during your training adequate in preparing you for teaching music in pre-primary schools?

Yes ____ No ____

b. Please state your reasons ______________________

________________________________________
________________________________________

8. Are you undertaking tertiary music studies at present? Please give details.

Institution ______________________________
Area(s) of specialization ____________________
9a. Have you had any formal vocal training?

Yes ___ No ___ c14

b. If Yes, how many years of formal training did you have?

__________ c15

10a. Do you currently play any musical instruments?

Yes ___ No ___ c16

b. If Yes, please specify which and your years of formal training.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Formal Training</th>
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<tbody>
<tr>
<td>1.</td>
<td>1. ____________ Years c17</td>
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<tr>
<td>2.</td>
<td>2. ____________ Years c18</td>
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<tr>
<td>3.</td>
<td>3. ____________ Years c19</td>
</tr>
<tr>
<td>4.</td>
<td>4. ____________ Years c20</td>
</tr>
</tbody>
</table>

11a. Do you use any of the above instruments when teaching music?

Yes ___ No ___ c21

b. Which instruments do you use? Frequency of use per week.

<table>
<thead>
<tr>
<th>a.</th>
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<tbody>
<tr>
<td>1.</td>
<td>1. ________________</td>
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<td>3. ________________</td>
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<tr>
<td>4.</td>
<td>4. ________________</td>
</tr>
</tbody>
</table>

12a. Have you attended any music courses/workshops/seminars in the past two years?

Yes ___ No ___ c26

b. If Yes, describe the:

Topic of workshop ____________________________

______________________________ c27

Length of workshop ____________________________

______________________________ c28
Classroom Music

13. Is the pre-primary in which you teach an on-site or off-site location?
   On-site ________ Off-site ________ c29

14. On a rating scale of 1 - 10 (1 being the least important), how important do you consider music education to be in the education of young children? (Please circle)
   1 2 3 4 5 6 7 8 9 10 c30

15a. How often do the pre-primary school students receive your instruction per week?
   Not at all ___ c31
   Once ___
   Twice ___
   Three times ___
   Four times ___
   Five times ___
   Other (please specify) _______

b. Do you consider this is adequate?
   Yes ___ No ___ c32

c. If No, please indicate your reasons ________________
   ____________________________________________________________
   ____________________________________________________________ c33

16. What is the average duration of a music session?
   5 - 10 mins ___ c34
   11 - 15 mins ___
   16 - 20 mins ___
   21 - 25 mins ___
   26 - 30 mins ___
   30 + mins ___
   Other _______
17. For what period of time have you been providing music education in the pre-primary school? (i.e. is it a relatively recent arrangement at the school?)

18a. Do you condone the use of music specialists in pre-primary schools?  
   Yes ____  No ____  

b. Please state your reasons  

19. Indicate the other classes which you teach music to on a weekly basis.

20. What other teaching responsibilities do you undertake? (library, private tuition, music specialist for other schools etc.).

21. On which major music educators do you base your teaching methodologies/techniques?
   Orff  
   Kodaly  
   Dalcroze  
   Other
Resources and Facilities

22a. Does the pre-primary school have a music corner?

   Yes ___ No ___

b. Are the students allowed informal use of the music corner?

   Yes ___ No ___

23. State those instruments available in your pre-primary school and indicate the frequency of their usage by students.

<table>
<thead>
<tr>
<th>Tuned Instruments</th>
<th>Frequency of Usage per week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Everyday</td>
</tr>
<tr>
<td>Piano</td>
<td></td>
</tr>
<tr>
<td>Autoharp</td>
<td></td>
</tr>
<tr>
<td>Xylophone</td>
<td></td>
</tr>
<tr>
<td>Glockenspiel</td>
<td></td>
</tr>
<tr>
<td>Metallophone</td>
<td></td>
</tr>
<tr>
<td>Chime Bars</td>
<td></td>
</tr>
<tr>
<td>Tunable Timpani</td>
<td></td>
</tr>
<tr>
<td>Tambour</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Tuned Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tambourines</td>
</tr>
<tr>
<td>Cymbals</td>
</tr>
<tr>
<td>Finger cymbals</td>
</tr>
<tr>
<td>Drums</td>
</tr>
<tr>
<td>Castanets</td>
</tr>
<tr>
<td>Maracas</td>
</tr>
</tbody>
</table>

\(c_{44} \quad c_{45} \quad c_{46} \quad c_{47} \quad c_{48} \quad c_{49} \quad c_{50} \quad c_{51} \quad c_{52} \quad c_{53} \quad c_{54} \quad c_{55} \quad c_{56} \quad c_{57} \quad c_{58} \quad c_{59} \quad c_{60} \quad c_{61} \quad c_{62}\)
24a. Do you feel the available instruments are adequate for the musical activities in the pre-primary school?

Yes ____ No ____ c73

b. If not, list those instruments you would like to have.

__________ c74 __________ c75 __________ c76

__________ c77 __________ c78 __________ c79

__________ c80 __________ c81 __________ c82

25. List other types of equipment you use for music lessons (records, tape recorders etc.).

__________ c83 __________ c84 __________ c85

__________ c86 __________ c87 __________ c88

26. Does your pre-primary school have exclusive use of the music equipment?

Yes ____ No ____ c89

27a. Are the instruments readily accessible?

Yes ____ No ____ c90
b. If No, from where are they borrowed?

________________________________________________________________________

________________________________________________________________________

__________________________________________________________________________ c91

28a. Are the musical instruments and other music equipment you use in the pre-primary school in good condition?

Yes ____ No ____ c92

b. If No, indicate particular areas of concern.

________________________________________________________________________

________________________________________________________________________

__________________________________________________________________________ c93

29a. Do special facilities/rooms exist for music education/instruction in the pre-primary school at which you teach?

Yes ____ No ____ c94

b. Are such facilities adequate? (space etc).

Yes ____ No ____ c95

c. If No, briefly describe difficulties caused by lack of physical facilities.

________________________________________________________________________

________________________________________________________________________

__________________________________________________________________________ c96

30a. Are you satisfied with the music situation at the pre-primary school? (resources, equipment, class numbers etc.).

Yes ____ No ____ c97

b. If No, please state your reasons.

________________________________________________________________________

________________________________________________________________________

__________________________________________________________________________ c98
31a. From where do you usually go to seek information concerning:

1. Music instructional matters/methodologies
   
   2. Music resources/aids
   
   3. Music reference materials

b. Of those mentioned, indicate where your needs are not being met.

32. Briefly indicate the improvements (if any) you would like to see in early childhood music education in Western Australia.