Gender equity: retrospect and prospect, with recommendations for the School of Education: part 1

Lesley P. Newhouse
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GENDER EQUITY: RETROSPECT AND PROSPECT,

WITH RECOMMENDATIONS FOR THE

SCHOOL OF EDUCATION

PART 1

By Lesley P Newhouse
WA College of Advanced Education
Department of Education Studies
 Nedlands Campus

April 1990
GENDER EQUITY: RETROSPECT AND PROSPECT,
WITH RECOMMENDATIONS FOR THE
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GENDER EQUITY : RETROSPECT AND PROSPECT,

WITH RECOMMENDATIONS FOR THE

SCHOOL OF EDUCATION

PART 1

BRIEF FOR THIS REPORT:

My brief is to review the literature and to evaluate the research findings with regard to the impact of Gender on Classroom Practices. Secondly to formulate from these deliberations recommendations to the School of Education, especially with regard to the Bachelor of Arts (Education) programme.

THE BROAD CONTEXT OF THIS REPORT:

"Levers of Change begin with Legislation" (Randall, 1987:206)

This report is set in the social and legal context of Affirmative Action and within a college situation which, in principle, acquiesces to this legislation. It is my belief that the education of girls can only effectively be considered within the social and legal framework of Equal Opportunity and Affirmative Action; and as an integral part of the growing concern for Equity within our education system, with its concomitant emphasis on excellence. (Boomer Report 1985).

(a) Equal Opportunity Legislation:

The basic assumption underlying this legislation is that "our society is based on the belief that everyone should be treated equally, but discrimination does occur in finance, employment opportunities, job promotion, club membership, education and accommodation". (1)

One of the major goals of Equality of Opportunity is the removal of "blocks" to fulfilling the potential and viability of all individuals in the workplace and education. Research here and overseas has shown that discrimination does occur in the education and employment opportunities of girls. This is often exacerbated by further disadvantages on the basis of race, culture, disability, giftedness, rurality and socio-economic status. (Beazley Report 1984 Chapter 6).

(b) Affirmative Action:

An important break-through in the eighties has been the overarching legislation with regard to Affirmative Action which is "a systematic approach to overcoming not only existing discrimination, but the effects of past discrimination in order to achieve equality of opportunity for women". (2)
EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION IN THE WACAE: A CLIMATE FOR CHANGE:

"Pre-requisites for educational and administrative reform include political will" (Randall 1987:204)

There is, in place in the Western Australian College a "whole institution approach" to implementing an Equal Opportunity policy, together with a time-line for the implementation and annual on-going evaluation of progress in Affirmative Action. (3) However Paige Porter (7) (1987:3) makes the pertinent point that tertiary institutions need to "go beyond the statute books":

"It is worth mentioning that reports required from tertiary institutions all refer to employment primarily and as the Equal Opportunity Act is broader than this, the Equal Opportunity Commission may wish to review the delivery of educational services to students in these institutions at a later date".

It is heartening to note that the Head of the School of Education has already shown sensitivity to the gender issue and pre-empted this by initiating the current research study. His aim is to formulate recommendations with regard to gender inclusive curriculum in education. Leadership in Educational change is a vital first step, particularly in the area of equity. (Sargent 1981).

THE PRINCIPLE OF EQUITY AND EXCELLENCE

There has, in the past, been a tendency to equate equality with mediocrity. (Bantock 1973:216).

There is, now, strong Commonwealth support for the principle of Equity and Excellence. Quality and Equality: (1985) is a key report under which all equity issues can be subsumed. There is a clear vision for the education of all children together with a commitment towards achieving the illusive goal of equality with quality:

"The Commonwealth is the guardian of equity across the nation, and should ensure that the quality of a child's schooling is not dependent upon living in a particular State or Territory, and that all systems and schools share the responsibility for contributing to the quality of education for all children". (1985:12)

Funding:

Together with this visionary commitment, there is the all important funding support for projects of National Significance. Since the establishment of the Schools Commission in 1973, the Commonwealth has provided resources to meet identified deficiencies in schooling, both primary and secondary education, particularly in meeting the equity needs of disadvantaged students, including girls (1985:12,22,160).

"During 1987, some $1,645 million was allocated to programmes aimed at improving the education of girls" (Leder, 1989: 95)
Teacher Education and on-going Professional Development:

There is, in this report, a strong emphasis on participative decision-making by teachers as major contributors "to a quality education for all children" with the flexibility, skills and capacity "to change programs dependent on changing priorities and demands" (1985:164).

At the present time, for example, "of particular importance is the changing social and economic role and status of women which is affecting both the public and private lives of students and teachers in schools, changing traditional authority patterns and demanding a range of educational responses". (1985:21).

This has strong implications for the type of teacher required for the 1990's, namely a well-educated participative decision-maker, perceptively conscious, in this context, of changing Equity needs.

Parent Participation in School:

Writers of the report demonstrate a positive attitude towards more active participation of parents in the educative process. A recommendation that could develop a vital partnership between home and school to encourage excellence and hopefully alleviate any disadvantages "blocking" the development of a child's potential in all aspects of her/his development.

In essence, we now, in gender equity, fully recognize "the central importance of adults in school communities shaping the ways girls and boys become men and women" (Evans, 1989:74).

Measuring Progress - A Need for Accountability and Dissemination of Information:

The Boomer Report states on page 163, "there is a need to investigate educationally useful ways in which the Commonwealth and Education Authorities can report on achievements over time". This is clearly good educational practice, especially when schools are monitoring "equality and excellence" in their curricula over a period of years. It also gives schools the opportunity to disseminate such findings in reports; to make adjustments to programmes; and to be aware of changing equity needs.

Paige Porter (1987) advocated the need for Performance Indicators with regard to Equal Opportunity in the school situation to be built into school development plans. (Reference 7 (1987), Table A, Table B, Table C, p33). Likewise, it is important that examples of performance indicators should be included and monitored in School of Education development plans in relation to student and staff characteristics under the Equal Opportunity Act. (See also Randall 1987:205)

Implication for Educators Promoting Change in the Tertiary Sector to Accommodate Gender Equity:

"Promoting and managing change is a critical issue in Australia, perhaps the only society in the world in which the back lash arrives ahead of the reforms" (Randall 1987:204)
Re-evaluating a Personal Philosophy of Education to blunt Opposition to Change:

"The truth is, a great mind must be androgynous having the characteristics of both sexes". (Samuel Taylor Coleridge)

It is an essential first step, as educators that we reconsider our philosophy of education to ensure that "Equity and Excellence" are an integral part of our belief system. Otherwise there is a great danger that whatever changes the School of Education makes with regard to equity will, at best, only be cosmetic; and ultimately superficial appeasement to children and students who may be disadvantaged on the basis of gender, race, disability, giftedness, aboriginality or social class in our schools.

Broadening the Concept of Equity:

"Another lever of change is changed structures" (Randall 1987:206)

As educators in the 1990's we cannot ignore the need to regard the concept of equity in a much broadened sense. For example, although the parameters of this report are concerned with the education of girls, we create an equity image in the minds of students and parents by the very formulation of academic staffing in our universities, colleges and schools.

As Paige Porter (77: point 1.5) evidenced in her recent report "The general absence of female teachers in positions of higher responsibility in the Ministry, the absence of Aboriginal teachers altogether and relatively small number of teachers from ethnic backgrounds other than the English speaking and European conveys very clear messages to students and parents about the importance to the Government of remedying these areas of historically - based discrimination. In the case of education, the process can not be separated from the product.

Similar findings are reflected in the statistical data in the WA College's Higher Education Annual Report Form, 1988, with regard to the imbalance of women lecturers to men lecturers particularly in leadership roles (See (3) Attachment 2: Statistical Data).

Preparation for changes in college with regard to gender equity:

"Change must not be stifled, but vigorously promoted. As human beings we have the freedom to criticise, to challenge, to choose. We need each other's support in our efforts to change the world to make it a better place for all of us" (Randall 1987:207)

During the 1980's, I was involved in effecting changes in the education of the gifted (Jones and Newhouse 1981, 1982 & 1984) and latterly concerned with the Education of Aborigines. In both instances, I was confronted by "Resisters" who initially had no wish to recognize the problem or to investigate the wide range of literature on the needs of these groups. In the context of the present research on gender equity, I have both observed and encountered hostile resistance, often accompanied by complete apathy to the issue and a deep disregard for the wealth of literature on the topic. This is a worrying aspect especially in educators and a far from satisfactory beginning to initiating change related to gender equity in our college and in the schools.
Particularly as Evans (1989:74) argues that it is "us - the teachers, academics, researchers, policy makers, union officers and administrators" - who may be at the root of gender differentiation and sexism in the education system, rather than what is taught in the school curriculum.

As a consequence of this "wall of resistance" I have decided to follow two lines of research. Firstly, to study the origins of this hostile, apathetic resistance to such changes; to think about the reasons for the opposition and perhaps to allay xenophobic fears.

Secondly, a natural follow up would then be to identify research in the literature supporting the need for positive action in the education of girls in a technological society.

I hope that the possible outcomes of my research will be: (a) to encourage both debate in formal and informal group discussions (Connell 1967:245) and (b) to achieve consensus with regard to integrating the gender equity principle in the School of Education curriculum.

RECOMMENDATIONS ASSOCIATED WITH BROAD GOALS:

Societal Level: It is recommended that:

As members of society, we should consider through reading, reflection and discourse, the impact of equity on our construction of reality as people and educators.

College Level: It is recommended that:

As members of the WA College, we should be aware in the 1990's we have a legal obligation to move 'beyond, the statute books'. We should regard ourselves as "transformers" and actively implement changes that will promote equity and excellence in the college.

School of Education Level: It is recommended that:

That the School of Education take a leadership role in the WA College by actively implementing changes that will promote equity and excellence.

A vision for education in the 21st century be formulated by gathering data pertaining to world view issues; together with a retrospective study of the history of the development of the faculty's specialized bodies of knowledge and the role of men and women in its formulation.

Where it has been demonstrated that there is an imbalance of power in the upper echelon for men and women, the School of Education actively make efforts to redress this balance of power which will have consequences for decision-making in curriculum and future policy making in the field of education.

The Head of School take this gender imbalance seriously and value the need to recognize male and female perspectives on problem solving, living, and in the development of individual potential of all faculty members.

In this time of Affirmative Action, opportunities should be provided for women to excel in leadership in the field of education.
Our leaders in the School of Education seriously address the need for action research in a scholarly manner with regard to the integration of equity curricula in our programmes and in the schools.

All faculty members in the School of Education be aware of the different constructions of reality that are influenced by gender, race and social class differences, which percolate into practices in our college and schools in Western Australia.

That all faculty members be conversant with historical and current literature on gender issues with regard to its impact on their own career paths and academic progress.

That all faculty members should have a scholarly awareness of the impact of language, both written and spoken, on the human construction of reality.

That all faculty members be increasingly aware of their respective roles in informal conversations and formal deliberations between the men and women.

That all faculty members be sensitive to the needs of support staff and their modus operandi in communication and cooperation in the work place to enhance conditions for all in the School of Education.

That the School of Education include an assessment of effectiveness in monitoring equal opportunity objectives. Consideration should be given to the use of performance indicators in this regard.

REFERENCES: EQUITY AND EDUCATION

These references were used in the preparation of this review on gender equity and education and form a basis on which the recommendations for the School of Education were formulated.

Reports with particular reference to:

Equity of Opportunity, Affirmative Action, Equity and Excellence:


"A term which encompasses the notion of power relations and patterns of separations between males and females. These relationships are socially defined and constructed, and are not biologically given. Hence gender as a concept is differentiated from sex which is viewed as a distinction based on biological determinants". (The Penguin Macquarie Dictionary of Australian Education (1989:145).

"Whilst gender issues continue to occupy a marginal position in official doctrine, then it is destined to remain a marginal consideration in teacher education programmes" Skeleton (1987: 174).

In the tradition of investigative research I called initially for a range of computer searches reviewing the literature of the education of girls since 1984. The volume of research was staggering, every aspect of gender equity had been described, researched and justified. Innovatory curricula for girls have been extensively documented throughout the world, together with directions for successfully implementing and evaluating such changes.

Of particular interest too, were books on sex differences, papers on feminist sociological perspectives with their vision of outcomes for girls and women; and most recently discussion papers on modern philosophical thought in education. Yet, according to Foster (1989: 27,28), we are still at a stage of curriculum change where "women are a disadvantaged, subordinate group, where girls are excluded from full participation in the curriculum because of its white male-centredness".

It was at this point in my research, that I began to question why we are still so far away from a transformed 'balanced' curriculum, with an inclusive vision of human experience, based on difference and diversity not sameness and generalization? (Schuster and Van Dyne 1984 cited by Foster (1989:29).

The root of the problem appears to lie in gender and the power and superiority ascribed to masculinity. A sobering thought, according to Sargent (1981:9) is that "new career women pushing their way at least to the middle management heap are buying into the same myths and suffering the accompanying price of stress and single-mindedness that the competitive style has cost men for decades".

What price gender equity for both men and women, if it means surrendering the femininity balance of our minds and personalities. What is refreshing is that there are "pockets of change among men triggered by interest and awareness of what is means to be a man, what costs society has exacted in return for conferring manhood, what's really in the women's movement that benefits men" (Sargent 1981:10).

Gender Consciousness:

"As men and women tilt slightly towards each other's behaviours we have the quiet murmuring of new ways of acting" (Sargent: 1981:12). Raising the level of consciousness of the impact of gender on our construction of reality is vital for both men and women particularly when the femininity aspect of our nature is denied, devalued and hence stifled in our thinking, problem-solving and creativity.
"The truth is, a great mind must be androgynous, having the characteristics of both sexes ... where a poetic spirit is coupled with a logical approach (Sargent 1981:3). Androgyny is "the balanced possession of both feminine and masculine psychological characteristics by an individual regardless of whether the person is biologically male or female". (The Penguin Macquarie Dictionary of Australian Education (1989:17)

Besides a need for balanced thought and creativity is a concern for the emotional health of both men and women, where masculinity and femininity may become negative and even destructive if they are represented in extreme and unadulterated form.

"Extreme femininity, untempered by sufficient concern for one's own needs as an individual may produce dependency and self-denial, just as extreme masculinity untempered by a sufficient concern for the needs of others may produce arrogance and exploitation" (Sandra Bem (1975) in Sargent 1981:3)

Raising the Level of Awareness of the Impact of Gender on individual Constructions of Reality

"To me, gender is the most substantial, pervasive and taken for granted social structural feature that shapes our lives. Unlike class or ethnicity, gender separates the lives of men and women in the most minute details of everyday social life". (Evans 1989:73).

Bearing this quotation in mind, as an educator and a woman, I needed to raise the level of awareness of the impact gender has on my construction of reality. Prompted by the work of Kelly (1955) on Personal Construct Theory, I researched my construction of reality by using a phenomenological approach. I researched this in several ways namely by:

(a) Retrospective journaling of my own child rearing and socialization: in particular, how it had shaped my personality; my mind and thinking; my emotional adjustment, values, aspirations and morality; my parents' and teachers' aspirations and expectations for me and the way they influenced my academic learning and career paths; together with my adjustment to roles in my personal professional and family life and the people who deeply influenced these aspects of my adult life with their concomitant constraints and degrees of freedom to choose.

(b) An indepth review of the impact that gender consciousness has had on my present philosophy of life and education, and future life changes.

(c) Viewing my life in the broad context of the past 50 years, particularly in Britain, Cyprus and Australia, and the prevailing ideology of the period which deeply influenced policies and practices in education, child-rearing and future adult roles of men and women.

(d) An intensive overview of the past two hundred years of education in England and Australia, with particular regard to the educational provision for girls and vocational opportunities for women. A special study of women teachers in the twentieth century provided a cameo of their still vulnerable status.
(e) Perceiving the 20th century, from a sociological perspective, as a century of redressing social injustice and providing 'equality of opportunity' particularly through formal education.

(f) Absorbing myself in the history of women, through formal historical accounts together with autobiographies. This was very much an exercise of heart and mind where I could develop an understanding of the origins of injustices, balanced by a knowledge of women's achievements; and the conscious attempts made by enlightened men and women to redress these inequities over time and as far as the prevailing attitudes and values of "the times" would allow.

(g) Gaining a realistic insight into sex differences to ascertain whether distinctions in sex roles are "grounded in natural differences or arbitrary impositions of a culture" (Brown 1965:162)

(h) Investigating language as a crucial factor in the construction of reality.

(i) Revisiting the sociology of knowledge and the control of knowledge by the elite of society.

Gender Segregation through Child Rearing and Socialization

"Socialization practices instil the social mores in individuals from a very early age, and they become permanent ingredients of the person's psychological make-up and outlook on the world" (Furnham & Gunter 1989:90)

Delamont 1978 has argued that "the process of gender segregation commences from the moment of birth. Most people cannot resist type-casting the new born as masculine or feminine" (Evans 1989:73).

We are greatly influenced throughout our lives by signs and symbols that mean masculinity and femininity. As educators it is important to recognize that these are "flexible, subjective and often deified categories from the social world that have been deliberately and thoroughly established in the mind of every new generation". (Evans 1989:73)

Thus sex-typing is a process through which we come to feel, think and act in ways considered by our culture to be masculine or feminine (Smart & Smart 1977:328).

A recent survey by Furnham & Gunter (1989) on young British people's social attitudes devote a full chapter on the role of men and women, where "young people exhibited a mixture of broadmindedness and traditional "stereotypes" in their beliefs and opinions about the roles of men and women (1989:104-106).

It is these young people's "broadmindedness" that gives hope for the next generation, especially with regard to sharing home responsibilities, encouraging women to achieve their potential, being positive towards women's capability to achieve success, happiness and fulfilment both professionally and personally, and to lift restrictions in their academic and professional progress to reach their desired goals.
Roles and Stereotypes:

"Perhaps we should start by removing a major obstacle, one of the few cultural universals - the lower status of women" (Hoyenga and Hoyenga 1979:360)

Brown (1965:152-191) wrote convincingly on the distinction between social roles and stereotypes.

"A social role is a set of prescriptive rules or guides to behaviour for person's of a given category. Prescription, expectancy and performance all converge in the social role, but in the social stereotype we have categorical expectations without prescriptions and it is a matter of controversy as to whether or not the category performs in such a way as to confirm the expectancy.

Stereotypes are over generalizations about categories and are objectionable in the implications that important traits are inborn for large groups" (Brown 1965:173, 174 & 181).

At the very heart of the gender issue is unrealistic sex-role stereotyping and the invidious effects that ascribing lower status to the female role has on lowering the expectations, aspirations, self-esteem and behaviour of girls and women.

Roger Brown (1965:161) affirms this ascription.

"In spite of American distaste for ascribing status there remains a difference of rank between male and female ... it is a little "better" to be male than female".

"No Easy Road" as we move into the 1990's:

"To acknowledge that such a superiority does not exist demands high levels of rationality, open-mindedness and generosity and is especially difficult for those who have been taught that they were born with a natural superiority to others". (Sutherland 1981:201-204).

As educators, I believe we need to hold fast to the hope that:

"Creative and productive behaviour of both males and females in school and in life is likely to increase as unrealistic sex-role stereotyping of activities gives way" (Fox 1977:131) (see also Kubie (1958) and Sutherland (1981:201-204).
SEX DIFFERENCES

To gain a realistic insight into sex differences to ascertain whether distinctions in the sex roles are "grounded in natural differences or are arbitrary impositions of a culture" (Brown 1965:167).

Sex Role Appropriate Behaviour:

Sex role appropriate behaviour results from a combination of biological, cultural and psychological factors and therefore it is important that we do not de-emphasise and devalue biological factors in sex differences, (Clark 1988:32).

Hoyenga and Hoyenga (1979:358) declare that "feminist leaning would tend to make one seek for environmental etiologies only".

Notwithstanding, whatever the contribution of biology, it is clear that people learn a good part of what it means to be female or male in the particular society in which they are raised. (Hoyenga and Hoyenga 1979:290; Brown 1965:161; Maccoby 1966:25-55).

"The distinction between biology and environment is in many respects spurious. It seems more important to be able to recognize the environmental and biological biases that affect behaviour so that correct attributions can be made and more accurate control of the self be possible" (Hoyenga and Hoyenga 1979:359)

Review of the Literature:

The work of Maccoby and Jacklin (1975) is the definitive text of the psychology of sex differences. It is extensively quoted in the literature of the late 1970's and 1980's and, in particular, was used as supportive evidence in the Schools Commissions Report Girls, School and Society 1975.


I plan to focus my attention on sex differences generally in:

(1) Intellectual abilities, in particular verbal ability and IQ; Mathematical Ability; Spatial Ability.

(2) Achievement and Motivation for success and failure.

(3) Creativity, pursuit of talents and sex differences.

(4) Personality traits; Aggression and Dominance; Dependency and Passivity; Affiliation; Nurturing and Help Giving; Communication Style and Values.

(5) A cursory overview of Sexuality, Mental Health, death, disease, diet; and life satisfactions of gifted men and women.
With special consideration of gifted individuals, because research would indicate that with successful individuals there is less "sex stereotypic" influence, than same age peers: in their early socialization, education, career choices and pathways to adult achievement and accomplishments. (Sears R.R. (1977), Sears P.S. & Barbee (1977). These findings might then highlight not only bias that hinders, but influences that could enhance the development of intellectual and creative potential in all individuals, whether they are 'boys' or 'girls' (Hough 1985).

Theories of Sex Differences and Social Environment:

According to Hoyenga and Hoyenga (1979:255-260) there have been three well documented attempts to explain and integrate patterns of sex differences in cognitive performances. Two of them attempt to relate biology to sex differences— that of Buffery and Gray (1971, 72) with an evolutionary anthropological foundation that suggests consequent lateralization of the brain for men and women and Broverman (1964-71) who attributed the sex differences in spatial and verbal skills to the different effects of the sex hormones on neural activity. The third theory originally proposed by Maccoby (1966) relates sex differences in cognitive performances to sex role socialization.

Quotations from Research:

The following quotations reflect these theoretical underpinnings and are representative of the major focuses of research on sex differences. It is interesting to note that current thinking is moving towards acknowledging the interaction of biology and environment.

(a) "Generally speaking all these sex differences are most likely to appear after puberty and is likely to be a complex function of the hormonal changes of puberty and the changes in sex role that occur then". (Hoyenga & Hoyenga 1979:235-237).

(b) Jacklin (1983:16-17) concluded that "in general intelligence, attention span, cognitive abilities and task orientation boys and girls are alike when they enter school. These are all areas relevant to school behaviour that do not differentiate the sexes. In sum, boys and girls entering school are much more similar than they are different".

(c) However, Levy (1980), from neuro-biological research findings, is of the belief that "differences in ability between men and women are rooted in biological differences that are established in the brain during prenatal life, shown in later differences in brain organization and enhanced by hormones throughout the life span. (Cited in Clark 1988:514).

(d) Kimura (1985) (as cited in Clark 1988:34) believes that sex differences in brain organization are dynamically affected by the environment rather than on crystallized pattern laid down entirely by the genes. She says "there may be no inherent characteristics unique to the brain of either sex that necessarily limit the intellectual achievements of individual men and women". (See also Hoyenga & Hoyenga 1979:249-251).
Sex differences in cognitive abilities - in spatial performance, in mathematical performance, in verbal tasks - are a very complex function of the interaction of biological biases with socialized differences in expectations, motives and values (Hoyenga & Hoyenga 1979:285).

"The answer (to the relative lack of women geniuses) is more likely to be the action of prejudice and stereotypes and sex differences in achievement motivation and the reasons given by people for succeeding or failing". (Hoyenga and Hoyenga 1979:251).

Torrance (1962; 1968) as cited in Clark (1988:53) believes "as early as third grade girls were more reluctant to think creatively than were boys, by this time girls were conditioned to be more passive and accept things as they are, rather than manipulate and change things. Contributions of boys were more highly valued by their peers".

**Verbal Ability and IQ:**

**Sex Differences - IQ:**

1. As far as full scale IQ is concerned there are no sex differences, girls may have a slight advantage under the age of 7, especially in disadvantaged groups (Maccoby & Jacklin 1974).


3. High IQ pre-adolescent males have the highest IQ gains with age up to 41, equivalent females have the least gain (Kangas and Bradway 1971). Gifted girls are especially vulnerable during the adolescent period and Fox (1981) tells us these years are critical in the nurturance of gifted girls (Clark 1988:429).

**Sex Differences - Verbal Ability**

1. Overall women have verbal superiority especially in measures of verbal fluency. (Hoyenga & Hoyenga 1979:237) other areas of excellence include vocabulary, listening, speaking, ability at verbal analysis, comprehension of difficult material, creative writing, fluency, spelling.

2. Language develops earlier in girls than in boys (Moore 1967; Clark-Stewart 1973) and it remains in middle age as a superior function (Stevenson et.al 1968; Rosenberg and Sutton Smith 1969; Backman 1972). This tendency holds across cultures (Porteus 1976).

3. Males have more speech and reading problems. Boys have a greater incidence of speech defects including stuttering. More boys than girls have difficulty in learning to read, although by age 10 a difference in reading is no longer present (Thompson 1975 as cited in Hoyenga & Hoyenga 1979:237).
Possible Reasons for Differences in Verbal Ability and IQ:

1. The lateral organization of the brain seems to develop differently for girls than it does for boys and it seems biological differences are largely responsible:

   (a) Maturation of the left hemisphere seems to occur earlier and to be more pronounced in girls, which may allow for their apparent superiority in verbal learning (Kimura 1976; Bryden 1970; Pizzamiglio and Cecchini 1971; Van Duyne & D'Alonzo 1976; Read 1980).

   (b) Male lateralization of language to the left hemisphere seems to work against them and result in a more narrow though precise ability in language (Witelson 1976).

2. Further biological evidence suggests that:

   (a) Whilst additional Xs and Ys on sex chromosomes, depress IQ, it is not sex linked.

   (b) We cannot conclude the excess androgen before birth increases IQ or verbal ability in humans.

   (c) Activational hormones may increase brain activity performance by activating emotional activity in exploratory behaviours.

3. Traditional and stereotypic roles defined by our culture of what masculine and feminine behaviours are, still serve to limit a full range of function for both boys and girls. (Clark 1988:34; Hoyenga & Hoyenga 1979; Katchadourian 1985:255).

4. Sex typed personality traits are associated with IQ changes in both genders. For example passivity in girls was associated with decline in IQ from ages 6 to 10, whilst aggression with boys was associated with an increase in IQ in those ages. (Kagan et al 1958 cited in Hoyenga et al 1979:239). Girls with non-traditional masculine orientation had higher IQ's or higher academic performance than more traditional girls (Doherty and Culver 1976; Kagan and Moss 1962). Hence sex role traits may promote intellectual development in both sexes during childhood.

5. Parental Variables:

Bayley and Schaefer (1964 as cited by Maccoby 1966) found in middle class boys, maternal over-protection and warmth lead to particularly high verbal scores, whilst lack of maternal intrusiveness seemed to facilitate development of IQ in girls.

A high degree of reading displayed by their fathers which lead to higher verbal ability of their daughters but not their sons (Bing 1963 as cited in Hoyenga et al 1983:239).

Good relationships with fathers may facilitate verbal abilities, and father's absence from home may inhibit them, more in boys than girls (Biller 1974 cited in Hoyenga and Hoyenga 1979:239).
6. **Teacher Variables:**

Skeleton 1987:168 explored the image of "boys only being poor readers and also disruptive" which she regarded as an example of sex discrimination and the basis of self-fulfilling prophesies for secondary school. She put the blame firmly in the court of the primary training course under investigation.

7. **Masculine Attribution and its Effect on the Abilities of Gifted Adolescent Girls:**

Where assertiveness, independence, leadership and analytical thought are viewed by parents, peers and teachers as "masculine" the gifted girl is forced to chose between being gifted and being feminine. "Such a choice should never have to be made" (Clark 1988:429).

8. **Gifted Boys With Literacy or Artistic Leanings:**

Gifted boys may suffer from sex-role expectations of parents, particularly from the lower classes where literacy and artistic pursuits are not valued. Some segments of the population do not consider reading to be a masculine endeavour. Even in families where education is highly valued boys may be rewarded for physical, aggressive activities rather than more passive, intellectual ones (Fox 1977:118).

**Spatial Ability:**

It is the capacity to visualize objects in three dimensional space. This ability correlates highly with tasks of field independence, suggesting that a common factor is involved (Kagan and Kagan 1970; Sherman 1967 cited in Hoyenga et al 1979:243).

Spatial ability is correlated with performance IQ (Crandall and Sinkeldam 1964 cited in Hoyenga et al, 1979:244).

It is positively correlated with science and mathematics courses and with such skills as technical drawing, working with machines and watch repairs.

It is negatively correlated with language courses and not related to general school success (Bock and Kotakowski 1973; Peterson 1976 cited in Hoyenga et al, 1983:244).

**Sex Differences - Spatial Ability**


2. Cross culturally, the sex difference is seen in most groups tested (Porteus 1965). One notable exception, Eskimo women who are not socialized to be more dependent on males (Kagan and Kogan 1970; Maccoby and Jacklin 1974; Pande 1970; Parlee and Rajagopal 1974).
3. Sex differences are also a function of age. Boys surpass girls on tests of spatial function by four years of age (Levy 1980) and maintain this superiority to middle age (Porteus 1965, Davies 1965 cited in Clark 1988:32).

Possible Reasons for Differences in Spatial Ability:

Biological:

The biological differences are greater than for any other area.

(a) Male sex hormones (androgens) may affect the ability to visualize and manipulate objects mentally. Key components of mathematical skills widely considered to be more innate to males than females (Hier & Crowley 1982: cited in Clark 1988). (See also Bock and Kolakowski cited in Fox 1979:116).

(b) There is some research to suggest that increased oestrogen can lower spatial ability. (Broverman 1964; Peterson 1976; cited in Hoyenga 1983:215).

(c) Greater lateralization or specialized activation of spatial function to the right hemisphere seems to give males superior ability on tests of spatial skills. (Clark 1988:32).

(d) Stafford (1961) associated spatial visualization ability with an X linked recessive gene. However, a recent multi-factorial model viewed sex differences in spatial ability as being "affected by a complex interaction of genes, hormones and experience". (Hoyenga 1979:245).

Environmental:

Spatial ability has often been found to vary with culture type. Spatial ability correlates positively with socialization of independence and negatively with conformity (Kagan and Kogan 1970, Maccoby and Jacklin 1975).

Dawson (cited by Dyk and Witkin 1965) cross-culturally analysed spatial ability and found field dependence was associated with parental strictness, severity of discipline and polygamous fathers. J.W. Barry (1976) found minimal sex differences in spatial ability in hunter-gatherer societies where both male and female were assertive and independent.

Parental Variables:

Biller (1974) found father absence decreased spatial ability in both boys and girls. Bieri (1960) found that perceived parental similarity was the most important determinant of women's spatial scores, while acceptance of authority was the best prediction of men's scores.

Sex Role Stereotypic Traits and Spatial Ability:

Field independence and field dependence are often associated with sex role stereotypic traits. Those associated with field independence are typically associated and valued with "masculine traits" (Hoyenga 1979:247).
Sex Roles and Differences in Spatial Ability:

Young Children:

Coates (1974); Ferguson and Maccoby (1966); Fagot and Littman (1976). "The degree to which a three year old child engages in masculine activities was positively correlated with spatial ability both three and seven years later" (Fagot and Littman 1976 cited in Hoyenga 1979:248).

Adolescents:

Vaught (1965) looked at spatial scores with masculinity and femininity of college students and found that males and masculine students of either gender did better on spatial tests, but both tendencies interacted with ego-strength (self esteem).

Spatial ability may be curvilinearly related to sex typing, with extreme masculinity and extreme femininity in either males or females associated with lower spatial scores. It seems typical socialization of males moves them closer to the optimal level for spatial performance. (Hoyenga 1979:248).

Mathematical Ability:


Sex differences are not consistently found until the end of the elementary school years (Fennema & Carpenter 1981, Walden and Walkerdine 1985), although Mullis (1975) found sex differences in geometry skills as early as age nine. By the end of secondary school years, young men are quite superior to young women with respect to mathematical reasoning ability (Stanley 1973 cited in Fox 1977:115f).

Wood 1976 (cited in Hoyenga 1979:241) pointed out that "none of the items on which (English) girls out performed boys required what could be termed problem solving behaviour ... just the kind of operations which are most susceptible to drilling ... males did better on problem solving involving spatial ability". Wood concluded that the sexes may differ in learning style and preferences and that these differences might be removed by different styles of instruction. Further to this research, differences in learning style and cognitive style (people orientation) were investigated in 1989 by Foster (1989:32) and Sjoberg (1989:36) which have significant implications for instruction and choice of careers, particularly in mathematics, science and technology.

Possible Reasons for Sex Differences in Mathematical Ability:

Biological Bias:

There is only meagre evidence offered by Stafford (1972) of an X-linked gene which may affect Mathematical ability.
Turner's girls with no inductive gonadal hormones have poor mathematical ability. Dalton (1976) suggested high doses of prenatal progesterone may produce higher mathematical ability of either sex and Dawson (1972) suggested a role for activational androgen or oestrogen.

The relationship of spatial ability to interest and talent in Mathematics needs further study (Fox 1977:116).

Environmental Factors:

Differences in socialization probably account for most, if not all, of the sex differences in Mathematics performance.

Talent in Mathematics does appear to be related to masculine interests and values. (Aiken 1970; Astin 1974; Carey 1958; Milton 1957). Many educators do believe that sex differences in mathematics and science result, at least in part, from differential childhood experiences and reinforcement of sex-role appropriate interests (Fox 1977:117).

Father Absence:

Both genders are affected, with more affect on the boys than the girls (Biller 1974). Boys in father-absent homes may learn a more 'global or feminine' approach and thus tend to perform relatively less well on quantitative measures than verbal ones with respect to male norms (Carlsmith (1964) cited in Fox 1977:117).

Birth Order:

Second and third born girls especially with male siblings did better than first born girls. (Stafford 1972 cited in Hoyenga 1979:242).

Masculinity:

Was found to be positively correlated with Mathematical problem solving in both sexes (Stein and Barley 1973 cited in Hoyenga 1979:242).

Sex Role Identity: (Fox 1977:118)

Clearly problem solving skill is correlated with sex role identity for both males and females (Milton 1957). Early identification with a father particularly, an intellectual analytic father, is related to quantitative interests and abilities in both sexes. Astin (1974) studied highly mathematically precocious children and found parents notice this ability more in boys and cater for boys needs with toys and games of a scientific and mathematical nature. This was affirmed also by Casserley (1975) who investigated early frustration of girls in trying to get chemistry or construction sets for toys!

Mathematical Giftedness and Diffuse Organization within and between the Hemispheres of the Brain for higher level problem solving (creative)

Stafford 1972 (cited in Hoyenga 1979) found high quantitative ability associated with decreased male sex typing, where they were low in dominance, in aggression, masculinity, low autonomy and high in need for affiliation. Clark (1988:51) affirms these traits in those designated as "rationally thinking creative individuals" in any area of human endeavour.
The ability to use strategies from either hemisphere is the ideal, as Samples (1975) has shown "when the processes and functions of the right brain are facilitated, the self esteem increases, the performance of skills typical of left brain functioning is enhanced, and the students choose to explore greater numbers of content areas in greater depths" (cited in Clark 1988:32).

Course Choice & Teacher Attitudes and Expectations:

Subject choice begins in the primary school where, despite little overt curricular differentiation "all kinds of other varieties of segregation between the sexes are going on, which prepare the way for secondary schooling" (Deem 1980:179).

The influence of teachers' attitudes in conveying messages of what is regarded as acceptable masculine and feminine behaviour has been well documented (Buswell 1981, Evans 1982, Hough 1985).

Teachers also have higher expectations of their 'boy' pupils (Stanworth 1981) professing boys to be more "fun" and better students (Claricoates 1980) and providing boys with more time and attention (French & French 1984) and regarding them as good mathematicians (Skeleton 1987). So at a very early age girls are tracked into occupations that do not require a mathematics background.

Teachers are, inadvertently, reinforcing impressions that "it is feminine to be poor at maths, or, at least, lack of maths ability is more appropriate for females than males" (Hoyenga 1979:242).

In high school, girls are less likely to choose maths courses than males (Sherman and Fennama 1977). Both males and females find maths difficult, but males persist and are actively encouraged to do so for future careers. Girls stay away from maths and don't perceive it to be relevant to their lives. (Hoyenga 1979:243). Hence sex differences in performance become clearly evident.

Achievement - Sex Differences:

"It does not seem that the secure, self-sufficient successful self-actualizing gifted woman is commonly found in and supported by our society. Groth (1975) observes that the pattern for men's success is a straight conventional one, encouraged by society. Women's pattern is far more complicated, when even success brings failure" (Clark 1988:518).

Review of Hoyenga (1979) Chapter 9 Achievement and Motivation for Success and Failure:

There are several possible reasons for sex differences in need to achieve:

(1) that the difference really reflects differences in fear of failure. It has been found that girls are more likely to avoid situations of possible failure and to give up or withdraw after failure (Crandall and Robson 1960).

(2) that women have a higher fear of success, Horner (1972, 1973) found evidence to support this fear. This fear of success would prevent women from achieving success in the real world.
(3) that females have been socialized in such a way "as to fuse affiliation and achievement motives (after L.W. Hoffman (1972); Stein and Bailey 1973 cited in Hoyenga (1979:265).

Sex Differences in Fear of Failure:

Berens (1972) found that high N-ach Boys were significantly lower in fear of failure than high N-ach Girls, but low N-ach children did not differ in fear of failure scores.

In advanced classes, in mathematics and science, it is more likely that girls fear failure and poor grades, together with possible peer rejection (Fox 1977).

Sex Differences in Fear of Success:

Fear of success seems to reflect cultural attitudes towards achievement of men and women in our society and thus fear of success and achievement behaviour reflect the same underlying attitudes (Hoyenga 1979:270)

One of the findings of Leder (1979, 1980, 1982) cited in Girls and Tomorrow 1984:20 is that "high fear of success is incompatible with high performance and continued participation in Mathematics and that this incompatibility increases with grade level. In her view this highlights the effect of environmental pressures on mathematics related sex differences and emphasises the need to counteract the gender coding of school subjects."

Achievement and Affiliation - Sex Differences:


(b) Social approval has a greater effect in girls' achievement efforts than boys, where "appeal to mastery" increased boys' efforts (Hoffman 1972).

(c) Girls did better in orderly classes, but only in those that emphasised warmth and friendliness (affiliation) rather than achievement (Solomon and Kendall 1976).

(d) Girls receive "mixed messages", they are socialized to be feminine (passive, affiliative, dependent and nurturant) but are expected to do well in school to win parental approval (Hoyenga 1979:271).

(e) Girls learn to achieve in order to affiliate, which may account for a drop in IQ and achievement in adolescence. (Maccoby and Jacklin 1975) Sex role stereotypes have an impact. McArthur & Eisen 1976; verified the sex of a story book character who achieves, affects the task persistence in nursery school children.

(f) Adolescence is a time when fusion of achievement and affiliation for girls will affect their career and life plans, producing possible conflicts. Boys sublimate dependency and are more concerned about being at the top of their profession, being successful and being the best (Hoyenga 1979:272).
(g) McCall (1977) found that the education and job attitude of the mother, as role model, was a much better predictor of adult occupation and adult education for females than for males. Paternal education predicted achievement in males and females equally well.

**Adult Achievement:**

With respect to grades earned in high school and college, women are more academically predictable than men. (Seashore 1962; Stanley 1967) In a study of graduate students, the single best predictor of success was sex. (Educational Testing Service 1972). Females were less likely than males to attain a doctorate (Fox 1977:118).

Women are less predictable than men with respect to achievement as measured by standardised tests, where masculine interests and emotions are important (Fox 1976a). Mullis (1975) found that boys by age 17, scored as well or higher than girls on achievement tests in all areas except writing.

**Achievement in Mathematics and Science:**

In Mathematics and Science, sex differences in achievement are related in part to differential course-taking in high school, where many girls with high mathematical aptitude elect not to take advanced courses such as calculus. Differential course taking is related to girls' perceptions of their value for the future and differential encouragement by teachers, parents and peers (Haven 1972 cited in Fox 1977:118) (Parker and Offer 1989:118 in Leder & Sampson (1989).

**Exclusion from Achievement in Science:**

(a) Due to teacher expectations of girls and exclusion from science information.

At high school level both sexes believe that girls are better than boys at English but poor in Science (Ernest 1975). Such expectations are likely to influence teacher behaviours and reinforce differences. Casserley (1975) reported that gifted girls felt teachers, both male and female, reinforced stereotypes, even when they were inappropriate in classroom tasks by excluding girls from science information.

(b) Lack of acknowledgement of achievements of women scientists by peers.

A similar type of discrimination exists for achieving women in the sciences. Candice Pert was denied a Lasker Award on brain peptidylamine relationships, with the award given to a man. Jocelyn Bell failed to receive the Nobel Prize for her discovery of pulsars; the award went to the professor for whom she worked at the time of her discovery. (Cleaveland 1979 cited in Clark 1988:515)
Creativity: The Highest Expression of Giftedness:

Torrance (1962, 68) showed that as early as third grade girls were more reluctant to think creatively than boys. He also found that contributions by the boys were more highly valued. On measures of creative potential neither sex was consistently favoured (Maccoby and Jacklin (1975), yet men and women differ with respect to creative accomplishments in life and in most areas of human endeavour (Sears R.B.1977 and Sears P.S.& Barbee A 1977).

"The relative lack of women geniuses is more likely to be the action of prejudice and stereotypes and sex differences in achievement motivation and reasons given by people for succeeding or failing" (Hoyenga & Hoyenga 1979:251).

A Need for Masculine and Feminine Characteristics to be Truly Creative:

(1) Studies of creative people find that they have certain masculine and feminine interests and characteristics. An openness to all experiences seems necessary for creative productivity (MacKinnon 1962). People who stifle their opposite sex traits and interests may stifle their creativity as well. (Fox 1977:119; Clark 1988:32-34; 53-54;429).

(2) Most people have a dominant style and Herman (1981) believe that we can teach our whole brain to work together and that we must do so if we are to have the advantage of our full ability and creativity.

(3) "The existence of so complex a cabling system as the corpus callosum must mean it is important to stress again that the interaction of the hemispheres is a vital human function" (Sagan 1977:175 as cited in Clark 1988:36) (See also Levy 1985 as cited in Clark 1988:586).

(4) Clark (1988:33) has listed areas in which females excel and males excel, which suggest that the organization within the hemispheres of the brain is significantly different between males and females, with diffuse organization within and between hemispheres more typical of females and strongly lateralized organization more typical for males. In her chapter 'The Amazing Possibilities Ahead', Clark (1988:576) writes "in Human Understanding we are asked to reconcile two paths, the rational, empirical path of science and the inner path of intuition and imagination". People then who suppress their opposite sex traits and interests may stifle their creativity as well (Fox 1977:119).

Other Talents and Gifts and the Barriers to Accomplishments by Individuals:

Artistic and literacy interests are typically considered "feminine". Women tend to score higher than males on measures of artistic interest, yet fewer women than men have achieved acclaim as writers and artists (Fox 1977:120; Spender 1986).
Success in the arts is based on peer judgements, influenced by the greater status of men (Goldberg 1968, Pheterson, Kresler and Goldberg 1971). Fox (1977:120) has noted that men may have difficulties in developing their interest in artistic pursuits as children and hence is a basis of discrimination. Parents have fears that high scores on femininity scales of personality reflect homosexual tendencies in boys, rather than artistic sensitivity. Thus there are problems for both males and females where sex-role appropriate behaviour stereotypes inhibit male participation in the arts and create barriers to the adult achievement of women. Fox believes artistic sensitivity should be encouraged in both sexes in childhood and adulthood to develop the whole person.

**Personality, Values and Interests - Sex differences:**

"The culture that sex types temperament presents a profoundly different psychological situation from the culture that does not sex type temperament" (Brown 1965:167).

Personality factors, interests and values as well as cognitive abilities help to determine an individual's achievement in school and life (Fox 1977:120). Hoyenga and Hoyenga 1979 Chapter 10, Personality Traits, was a most informative evaluation of research on the consistent general behaviour of men and women and the way sex differences affect the way people act, move, speak and view the world.

**Aggression and Dominance:**

**Biological:**

Evidence strongly supports the idea that a biological bias affects sex differences in aggression.

(a) Men with two Y chromosomes are more impulsively aggressive than one Y men. Aggression results in dominance hierarchies.

(b) Effects of perinatal hormones on aggression and dominance is also quite consistent. Androgens activate aggression. Aggression increases in adolescence in males, when testosterone increases. There is some correlation of high levels of sex hormones and successful suicide with girls.

**Cross-Culturally:**

Males are assigned the more aggressive roles of fighting wars, making weapons and hunting. Boys are generally socialized to be more dominant and generally are. Boys have more clearly developed dominance hierarchies than girls and in boy-girl pairs, rated as tougher.

Boys engage more often in rough and tumble, are more verbally aggressive and most often respond to attacks with aggression. Husbands are usually dominant over wives in the home and men are always dominant over women in public places.

**Human Aggression:**

Hormones may merely facilitate the appearance of aggression in an environment that also supports that behaviour. (See also Brown 1965:167).
Two exhaustive reviews by Maccoby and Jacklin (1975) and Deaux (1976) found the human male is more aggressive. Boys and men are usually both more physically and more verbally aggressive. When aggressive, girls are more often verbally than physically (McIntyre 1972).

Men commit more murders and more assaults, only in child abuse is the child more often victim of the mother's aggression, which may be due to frustrations of the female role or simply because women are mainly responsible for the child.

Conditions that produce Aggression:

Observations of violence increases aggression in males more than females (Bandura 1966, Bandura & Ross 1961, 63; and Bandura & Walter 1963). Girls' aggression is more easily suppressed and boys' aggression requires less to elicit it. (Buck 1975).

Larwood (1977) found 'insulted' women in an experiment much more aggressive with the female experimenter than the male. Frodi (1977) found condescension provoked women. Women may use aggression against themselves, their children and more frequently use "the glare" and "graffiti in public looses" (Hawes 1974; Solomon & Yager 1975).

Competition and Co-operation, Dominance and Compliance:

Sex differences in competition and dominance are less clear-cut than those in aggression. What data there are suggest that men are more often dominant, while neither sex is more conforming. (Deaux 1976 and Maccoby and Jacklin 1975).

Dominance - Submissive Relationships:

1. Seem pervasive, with men more often the dominant gender (Wertz 1976)

2. Girls and boys have different starts very early in life which colours much of later interpersonal relationships including humour (Cantor 1976; Zillman & Stocking 1976) and marriage (Blood and Wolfe 1960).

3. Men are more often leaders, either by being willing to or "pushed into it" by women (Lockheed & Hall 1976; Eskitson & Wiley 1976).

4. May be affected by biological bias, where a bias for aggression is relevant for dominance.

5. Children's play patterns reinforce and extend any biological bias making sex differences in dominance even greater. (Hoyenga, et.al. 1979:297).

Need for Power:

1. Men usually have higher average "need for power" scores than women (Steward & Winter 1976).
2. McClelland (1976) found correlations of 'need for power' so different in the two sexes, that different motives or traits may be involved. For example: The need for power is significantly correlated with the need to affiliate in women not in men.

3. Children adopt very different power and dominance strategies at a very early age. (Braginsky 1970).

4. Sexes have differently effective dominance or power strategies. Men and boys found lies more effective, while women and girls found misdirection and rewards more effective. (Rosen and Jerdee 1973)

5. The research by Aries (1977) on interpersonal interactions dramatically summarizes the dominance and power of men. (Hoyenga et al 1979:316).

Dependency:

Behaviours may reflect a more stable and pervasive trait for females than males (Sherman 1971). On the whole evidence suggests "females, combining all ages are more dependent, passive and conforming".

Proximity Seeking:

Declines more with age in boys than girls (Lamb 1976).

Instrumental Dependency: Has crucial implications for girls and women.

One implication of the difference in adult responses to requests for help. Bings (1963) found greater maternal help-giving is associated with high verbal ability in children. In turn, high verbal ability facilitates instrumental dependency, (ie. asking for help). If daughters are encouraged to do well and reinforced for asking for help, affiliation is combined with achievement for girls but not for boys (Hoyenga 1979:301).

Passivity: whether there are sex differences depends how it is defined.

Sex differences in helplessness can be seen in the way women and girls attribute their failure to a lack of ability. Kagan & Ross (1962) reported that childhood and adult passivity are more strongly related in females (Hoyenga 1979:302).

Affiliation:

Girls form smaller groups that depend more on affiliative preferences. Adolescent girls are more concerned than males about social relationships, according to self-reports (Simmons and Rosenberg 1975).

Affiliative Behaviour:

There are sex differences according to (McClelland 1975; Booth 1972; Latane and Bidwell 1975; and MacDonald 1970). "Self-disclosure" is evident cross-culturally in females (Barry 1976; O'Neill 1976; Morgan 1976; Bender 1976). Females are better at reading body language (Bisck 1976; Rosenthal 1974) and show greater sensitivity to other people. Early maturing girls and late maturing boys have a high need for affiliation (Jones & Mussen 1958).
Nurturance & Help-Giving: (Hoyenga 1975:305)

There are biological and cultural biases for sex differences in nurturing and help giving. Hormones activate some components of maternal behaviour and affect nurturing. Androgen-insensitive women are very interested in children. Cross culturally child care is assigned to females who are often reared to be nurturant.

Lamb (1975) indicated however that there may be no sex differences in the amount of parent interest but the ways of expressing that interest may show sex differences. Bem's (1976) research on androgyny suggests a lack of sex difference in nurturing, just the way it is delivered.

Sex Differences in Communication Style and in Values:

Verbal Style:

Women and men use language differently (Spender 1985; Deaux 1976; Key 1975). There are recognizably male and female patterns of speech. Women sound more tentative than men. Female speech is seen as indicating submissiveness, passivity and less intelligence. They are interrupted by man more often confirming dominance interactions and dominance in knowledge. (Aries 1977 cited in Hoyenga 1979:316).

Non Verbal Communication:

Males and females of all ages keep varying distances from each other, stand, sit and carry objects differently. There are also differences in smiling, touching and eye contact.

Personal Space:

Women have smaller personal space than men and their space is invaded more often. These differences, like those in speech patterns, may simply reflect sex differences in dominance interactions. (Hoyenga 1979:310; Mahoney 1985).

Body language:

We label people as 'masculine' and 'feminine' by their body language. We learn about sex appropriate posture and gesture very early. (Rekers et al 1977)

Eye Contact: (Exlene 1972)

Lower status of women may make a difference and they are able to 'read' men through eye contact.

Touching:

Women do more same-sex touching than males (Mehrabian 1971).

Smiling:

Females smile more but for different reasons, for example, reflecting greater anxiety on the part of the woman.
Conclusion on Non-verbal Communication:

Many differences in non-verbal communication seem to reflect dominance and submissiveness. (Hoyenga 1979:314 & Spender 1980).

Physical Appearance:

Stereotypes may cause people to think it is more important for a woman to be physically attractive and so influence self-esteem. (Hoyenga 1979:314)

Morality:

Men and women differ in the evaluation of social rules and principles of conscience (Hoffman 1975). Females have more consideration for others. Females associate transgressions with guilt (internal locus of control) and males with fear. Males are more willing to "bend the rules" and women to judge more severely (Oetzel 1966; Sherman 1971).

In summary, moral judgements and behaviours of females are affected by having an internal locus of control for transgressions, by consideration of others and by guilt, whereas men are more motivated by fear of getting caught and the consequences. See also Gilligan's (1987) critique (in Littleford 1989:279 on Kohlberg's Theory of Moral Development).

Interests & Values: (Hoyenga 1979:315)

"Men seem to value competition, scientific toys and principles, prestige, power, dominance and freedom: Women personal relationships and security".

Sex differences in the affective domain appear greater than those in cognitive areas. Males and females differ markedly with respect to interests and values that relate to achievement and creativity.

Males score higher than females on the theoretical, economic and political scales and score lower in the social, aesthetic and religious values (Allport, Vernon & Lindsey 1970). The same patterns of sex differences emerged for gifted youth (Fox and Denham 1974; Fox 1976b), even when matched on verbal and quantitative aptitude and socio-economic background.

MacKinnon 1962; Southern and Plant 1968; Warren and Heist 1960; have found that high scores on the theoretical and aesthetic value scales are associated with creativity. A point well worth considering when nurturing creativity in individuals.

Theoretical interests appear to be correlated with mathematical talent and its pursuit which favours the male (Fox 1976b). Although gifted girls are more likely to have high theoretical interests associated with scientific pursuits than average ability girls they are still less theoretically oriented yet, more socially oriented, than their gifted male cohorts. Gifted girls have stronger academic interests than less gifted girls. (Fox, Pasternak & Peiser 1976).

Both gifted boys and girls differ from less gifted cohorts on measures of intellectual interests. Gifted boys tended to conform to the male stereotype, whilst for gifted girls there is sex-role conflict, since they have both masculine and feminine interests.
Conclusion:

The sexes differ in many personality traits, but most of these differences reflect different socialization pressures for the two sexes. Men and women educators need to look at the aspects of their own socialization that are deleterious to their well being as whole developing people. Gifted people in the following research gives an indication of the way women find happiness and satisfaction, with a surprising response from the men. Sears & Barbee (1977) utilizing data from the fifty-year longitudinal study initiated by Terman, isolated factors contributing to satisfaction in gifted women following careers variously and in combination as sole income earners, wives, mothers and homemakers. They found many women had high satisfactions in the general sense and in their work, but there was no "single path to glory". The happiness of these gifted women depended on earlier experiences and they seemed to have developed good coping mechanisms such that whatever their condition or circumstances they found satisfaction, well-being and joy. Sears R.R. (1977) noted that the major source of life satisfactions for Terman's gifted men was the happiness they gained from their personal life, family and children.

"When we begin to select a pattern and interpret according to the rule that the sexes are equal, we will construct a very different reality, we will make very different ideas come true. The claim for male superiority will no longer seem reasonable and male monopoly in power will be seen as problematic." (Spender 1980:2)

Prospect:

There are exciting and promising innovations in both gifted education (Clark 1988) and in gender inclusive school curricula, however there is a need for vigilant research of the calibre of Mahoney (1985) and Evans (1989), which continues to caution us to the pressures of the "living curricula" impinging on school life and to the dominance and power strategies of boys still operating in the co-educational and all boys' schools.

RECOMMENDATIONS WITH REGARD TO GENDER CONSCIOUSNESS AND SEX DIFFERENCES:

It is recommended that faculty members of the School of Education:

- be able to analyse their own socialization patterns and schooling, according to whether they are male or female.

- be astutely aware of the impact of being born male or female on their intellectual, personality, social and moral development.

- be aware of the limitations imposed by sex role stereotyping on the development of their creative potential individually and collectively.

- be knowledgeable about the integrated functioning of the brain and the ease of over-emphasising the lateralization of the brain in setting limits on their problem solving and creative potential. (innovations in neurobiology and the working of the brain).
be aware of the tendency to value the "masculine" to the detriment of the "feminine", leading to a devaluing of the women and their contributions and to certain types of knowledge or talents deemed to be "feminine".

create situations where men and women are perceived as working constructively, creatively and in harmony for the education of future generations of teachers.

reconsider their own goals as men and women in the 1990's to ensure the fullest development of their creative potential as educators, academics and people.

clearly envisage the role of male and female educators in preparing teachers for the 21st century.

For example by looking at their own subject preferences, preferred cognitive and learning styles, their motivation for achievement, differences in language use, preferred evaluation modes, and aspects of personality that limit creativity.

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A REVIEW OF THE HISTORY OF EDUCATION IN ENGLAND
AND AUSTRALIA, PARTICULARLY THE EDUCATION OF GIRLS,
FROM A VARIETY OF PERSPECTIVES

"Australian History has neglected the role of women .... thus
filtration of historically based research into school curricula and
to teachers and educators is important. It serves as a reminder of
dilemmas and obstacles faced and overcome in the past - and
understanding the past is essential to understanding and changing
the present." (Girls & Tomorrow, 1985:20)

When making recommendation for the education of girls and hence future
directions for the education of all children and youth, I believe it is
important to review the history of educational change from 1800 in England
and 1788 in Australia. The strong influence of the prevailing British
ideology created close parallels in the development of the two education
systems and the education of girls in particular. It is important too, to
perceive the education of girls as an integral part of concerned peoples'
efforts, in the past and the present, to counter social injustices and to
gain a better education for all children irrespective of social class,
gender and race.

Sources:

1. A re-acquaintance with the history of the English Education System,
its prevailing structure, the redefinitions of education and the
changing curricula over the past two hundred years. (Tawney 1931;
Musgrave 1968, 1970; Silver 1973; Bernbaum 1967; Simon 1965;

2. An overview of the history of education in Australia, as a former
British Colony (Brown 1986). To gain an insight into the
similarities and differences in the rate of change in educational
provision, especially for girls and women in the two countries.
(Mackinnon 1982; Benn 1970).

3. Recollections and reviews of men and women's personal history
through the literature and other media of the time, their
autobiographies and biographies, to balance the "black and white"
impersonal accounts of the historians and sociologists. (Bronte C.
1847; Dickens 1812-70; Disraeli 1845; Kartini 1970; Britain V.
1933; Knox D. 1982; Jackson B. 1970; Hasluck A. 1955; Bramwell
Booth 1970; Carter 1981; Mitchell 1984; ABC Series "Women of the
Sun", Summers 1975; Dixson 1976; Popham 1978; Daniels et.al. 1980).

4. A balanced retrospective evaluation of the progress in State
Education in Britain by male and female educators since the 1870
1970).

5. A history of the development of the teaching profession
particularly with regard to women. (Kelsall et al 1972; Partington
6. The formal educational provision for girls, the prevailing ideology, structure of the schools and the curricula they pursued according to social class and more recently according to race. (Wolfe 1977; Sturt 1967; Knox 1982; McKinnon 1982; Benn 1970; National Policy 1987: Appendix C).

7. A Sociological perspective on the interrelationship between education and other social institutions, the family, economics, politics, religion and the law. (Silver 1973; Bernbaum 1967; Leach 1968) and the relationship between technological change and educational provision (Musgrave 1968-1970; Silver 1973).

8. A study of 'Knowledge and Control' and redefinitions of 'Knowledge and Values' (Collier 1959; Young 1971; Parker 1981; Reid 1986 and Mares 1989).

9. A study of the identification of social injustices, the changing concept of equality of opportunity and consequent educational provision and change over the past two hundred years (Sturt 1967; Kelsall et al. 1972; Silver 1973; Benn 1970; and Sutherland 1981).

10. The prevailing ideology of the times and its impact on educational provision and differential valuing of people according to social class and gender. (Kelsall et al. 1972; Trotman 1982; Chadbourne 1983; Gray 1984; Reid 1986).

EDUCATIONAL CHANGE

"It is only by studying the present relationships between education and other major social institutions and by looking at the historical development of these relationships that any attempt can be made to foresee the possible future pathways of the educational system. Such prediction is made more difficult since the generation in power views the contemporary position through the perspective learnt in its youth" (Musgrave 1968:140-141)

Illumination from the Historical Review:

- The structure of education is, historically and still at the present time, organized on lines of social class, both in Britain and Australia, to educate or train for future life roles. (Tawney 1926 as cited on Silver 1973:xii).

- The organization of the education system was and is greatly influenced by the need for technology, primarily to give that society prominence and power over other countries (Simon 1970:ii).

- That countering social injustice and creating an education that is equitable for all is a struggle and a long haul and every step must be fought for (Jackson 1970:7).

- That an historical review keeps in perspective the "education of girls" as the pinnacle redefinition of education in the 1980’s and 1990’s to redress the inequities due to gender (Musgrave 1970).
That great progress has already been made, for example, in the education of the working classes (1870-1970); discipline and classroom management; the education of Aborigines in Australia, redefinitions of ability, the increased valuing of applied knowledge, qualitative and quantitative evaluation of classroom interaction, analysis of social structure and social organizations, acceptance of sociology as a discipline.

That adaptations to the school organization, curricula, classroom practices have always been somewhat anachronistic to the needs of the time (Musgrave 1968:140-141).

That the history of the education of girls has been "hidden" by the need to redress Social injustice of the working class.

The feminist system of 19th century Britain was born out of frustrations within the middle class family, forcing daughters into a reluctant economic system. (Musgrove 1959).

That women have contributed greatly in educational ideas and especially in identifying social injustice and campaigning for the needs of children and young people. This has particularly been brought to light in the research of the 1970's to the present day. (Bramwell-Booth 1970; Musgrave 1968; Jackson S. 1970:7; Brown R. 1986; Silver 1973).

In Australia and Britain the emergence of a three-tiered system of education based on lines of social class has created specially designed curricula for each social class. This differentiation still persists, with the eminent private schools, especially for boys, socializing for positions of power and authority. (Ogilive 1957; Wernberg 1967; Percival 1973).

The education of girls and women has been limited by their perceived subordinate adult role, the predominant emphasis on the housewife and mother role, little vision for their personal and vocational fulfilment and the "force fit" into boys' education, especially for the middle class girls. (Musgrave 1968; Benn 1970; Kelsall, Poole & Kuhn 1972).

That educational change emerges when education is redefined (eg. 1870, 1902 and 1944) due to social, political, economic, family and ideological pressures (Musgrove 1959; Musgrave 1968; Sturt 1967; Simon 1965; Maclure 1965; Bernbaum 1967).

An illumination of the contributions of women in the past and present in all areas of prestigious knowledge and human endeavour. (Mares 1989; Spender 1988).

The increasing contribution of women to the education debate initiated by women like, Miss Beal and Miss Buss in 1868, post war contributions of women particularly in the field of equality of opportunity, culminating in the overwhelming contributions of women in the area of gender equity in the late sixties to the present day. (Musgrave 1968, 1970; Silver 1973; Girls and Tomorrow, 1985).
That the curricula for girls, whether working class or middle class has been largely inappropriate even in preparing them for traditional roles. (Cooper 1969; Benn 1970; Musgrave 1970; Wolfe 1970; Sturt 1967; Knox 1982; McKinnon 1982).

Curriculum designed for the working class girl, as for boys, was limited and designed by the middle classes for limited adult roles and for maintaining their lowly status quo. (Jackson 1970; Musgrave 1968; Benn 1970).

Curriculum adopted by middle class girls was essentially a "force fit" of middle class boys' curriculum, with some addition of "female subjects", to give girls a chance to compete in a man's world. (Benn 1970; Musgrave 1970).

Mathematics curriculum for middle class girls was often reduced to arithmetic, due to societal (Cross Report 1880), family pressures, (Kamm 1958) and often because of the limited mathematical knowledge of the women who taught them. (Crowther Report 1959; Newson Report 1963; Martin 1972; and Cooper 1969 as cited in Girls and Tomorrow, 1985:15; Burton, et.al. 1986:21-22).

Biological sciences, rather than the physical sciences, have been more "acceptable for girls" and reinforced by family, society and the very nature of the subjects themselves.

Facilities for sciences in girls' schools tended to be inferior to its boys opposite number (Benn 1970).

Since the Second World War, "when the conventional barriers of class and wealth were transcended so that people stood in straight forward relationship to each other" (Simon 1970), there has been an increasing concern for "equality of opportunity" in education for all children irrespective of social class, race, disability, ability and most recently 'gender'; (Sturt 1967; Cooper 1969; Cooper 1969; Silver 1973; Sutherland 1981).

In relation to technological advance, a realization in the 1950's that the "pool of ability" did not include working class boys in particular (Crowther Report 1959). Latterly in the late 1960's, that girls' potential was not being harnessed and utilized for the benefit of society as a whole, became the concern of feminist thinkers, educators and economists (Cooper 1969; cited in Girls & Tomorrow, 1985).

That social mobility through education may cause individual suffering and alienation from family. (Jackson & Marsden 1968; Goldman 1968).

That girls' career horizons have been limited by a too narrow perspective of their adult role solely as wives and homemakers held by society, family and educational policy makers. (Cooper 1969; Kelsall et.al. 1972; Cockcroft Report 1982).
A major breakthrough in the 1960's when co-education in Australian primary schools became the rule rather than the exception, with complete equality of promotional opportunity for male and female primary teachers and equal pay. It also helped girls being educated at this level. (Cooper 1969).

The concept of comprehensive co-educational high school was, inadvertently one of the great social revolutions for girls. It contained the "seeds of a just deal for girls", in terms of equal resources and access for the first time to technical drawing and manual arts ('unfeminine'); and the availability of Mathematics and Science to vast numbers of girls. (Cooper 1969; Silver 1973).

That all improvements in girls' education in Australia up to 1970 had been "an incidental accompaniment to reforms in boys' education" (Cooper 1969).

That there is "one problem that women help to perpetuate themselves: our belief that we are unsuited for, unskilled at and unwise to attempt to succeed in maths, mechanics, sciences, technology and engineering as we do in language or letters, or commerce or catering. This goes back to the 19th century world of "boys' subjects and girls' subjects" (Benn 1970).

"That polarization of boys' and girls' life options through their education both produces and reproduces undesirable gender-based divisions in society" to the detriment of self and society. (Cooper 1969; Kelsall et al 1972; Wolfe 1977; Girls and Tomorrow 1985:3).

Educators in the 1970's commented that we should not lose sight of the "immense progress" in our primary schools since formal educational provision started (Clegg 1970), yet recognize that "the ceiling on the educational ambitions of girls remains. ... It will be a long struggle to bring genuine secondary education to the majority of girls, most of whom are without it in 1970" (Benn 1970).

A move in the late 1977's to look at the underlying ideology of a society and its impact on education and future life chances of women "that education fosters and embodies ideologies which sustain and legitimize the sexual division of labour and continued subordination of women" (Kelsall et al 1972; Wolfe 1977:3; Dixson 1976; Zainu'ddin 1975).

A move in the 1980's towards values education, both moral and social, with a number of policy and curriculum initiatives to enhance the valuing of girls and women by society and by themselves. (Chadbourne 1983; Gray 1984; Reid 1986).

the interdependence of the institutions of "the family" and "Education" and their changing roles, historically and currently, strongly influences the education of children. (Douglas 1964; Musgrave 1968; Leach 1968; Connell 1976; David 1980; Porter 1982).

That the interdependence of the institution of the family and the school is being re-examined. (David 1980; Porter 1982).

o The valuable insights of Bourdieu (1967) and Young (1971) in identifying ways in which the elite excluded the lower social class from prestigious knowledge are now being applied to ways in which girls and women have been and are excluded from "masculine" knowledge. (Kelsall et al 1972; Parker 1981, 1983; Trotman 1982; Kelly 1985, and Mares 1989).

o It seems that the 1990's will give educators an opportunity to reassess the appropriateness of educational provision for both boys and girls for present and future adult roles (Sutherland 1981).

o That "curricula are the product of complex and fugitive forces, but the forces are real and cannot be 'gainsaid'" (Ong cited in Musgrave 1970:238).

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EVENTS LEADING UP TO THE KEY REDEFINITION OF EDUCATION IN AUSTRALIA IN 1987

Preamble:

The educational research and reform in the period after the second world war mainly concentrated on remedying social injustices due to social class differences. The concept of equality of opportunity was redefined several times during this period (Silver 1973). Gradually a more pervasive inequity, that of gender, often compounded by class and race, has become the basis of a new definition of education politically justified by the Equal Opportunity Act of 1984 in Australia.

J Bielski of the NSW Ministry of Education wrote in the late seventies:

"Professionalism requires the professional to become familiar with the research and literature of his or her profession. For teachers not to examine the research and literature of sexism in education is to abdicate a professional obligation".
A REVIEW OF THE KEY MAJOR AUSTRALIA-WIDE REPORTS AND NATIONAL POLICY DOCUMENT IN THE EDUCATION OF GIRLS:

1. GIRLS, SCHOOL AND SOCIETY 1975: Ken McKinnon Chairperson.

The first report of significance in Australia published in 1975 in the 'International Year of Women', is seen as "a watershed in educational thinking in Australia" (Girls and Tomorrow 1985:1).

The committee's major concern was about "the persistence of unnecessary sex differentiation in education which we believe is potentially harmful to both girls and boys" (Girls, School and Society 1975:vii).

The committee hoped that their recommendations would be implemented in Australian schools to better equip them:

"to educate women and men so that they are both competent, high in self esteem, self-reliant, independent and equally capable of cooperation, empathy and social interaction. We believe that it is only if we educate women and men equally well that we can achieve a democratic society where women and men regard and act towards each other as equals" (Girls, School and Society 1975:vii).

This report was the basis for a chapter on schooling for girls in the Schools Commissions 1976-78 Triennial Report where they aimed to give support to programmes likely to widen girls' and boys' subject choices in school; increase teachers' and parents' awareness of sexism in education and its consequences.

There was a tremendous response to the spirit of the report.

"We believe that it is no longer defensible to act on unconsidered assumptions about the sorts of people either girls or boys should be, because they are born female or male" (Girls, School and Society 1975:17)

Special committees were set up to investigate Sexism in education. The States were encouraged to report on findings on sexism in schools. (See Girls & Tomorrow 1985:8 Table 1.3) There were inservice courses, seminars, conferences to meet perceived needs and reduce girls' disadvantage. Even the State Teachers' Unions set up special committees to investigate ways of eliminating sexism from education. Special materials for the use in classrooms were produced. There were inservice programs and seminars aimed at developing leadership qualities among women teachers. Research and publications, particularly from UK, America, Europe and Australia, led to a greater understanding of the sources of girls' disadvantage and the need for intervention to promote equality.

The bias in school readers, textbooks and in school practices was found to be based on unexamined and unjustified assumptions about the differences between females and males. Sex specific behaviours and expectations were thoroughly investigated and documented. Girls' educational choices and aspirations were shown to be clearly related to messages in the media and school materials and in traditional school arrangements.

However, it was painfully clear that schools were doing very little to break the cycle of inequity in the education system and in the position of women in our society.
Denise Bradley, Dean of the South Australia College of Advanced Education commenting on equity and schooling observed that "despite the convincing evidence in *Girls, School and Society* (1975) of the educational disadvantage suffered by girls.

1. Girls continue to be afforded far less opportunity than boys to realize their potential.

2. The quality of girls' education does not match that of boys in terms of developing confidence and self esteem and marketable skills.

3. There are still fewer resources for girls' schooling than that of boys.

4. Teachers continue to allocate less of their time to girls than to boys.

5. Teachers interaction with females does not encourage creativity and inquiry to the same extent as with boys.

6. Teacher education courses for both teachers in training and practising teachers do not give detailed attention to non-sexist curriculum development and non-sexist teacher behaviour.

7. School hierarchies are providing even fewer role models for girls than in 1975.

**Conclusion:**

This report is considered by Ramsey (1983) to be the benchmark from which to measure the significant progress since 1975:

"It is worth returning to again and again because in a sense it is all there, in the symptoms, the description, the analysis and the explanation ... yet the progress has been more an acceptance that there is a problem, and in describing and explaining it rather than in any measurable changes to girls' relatively disadvantaged position at the completion of their education .... The keys to equality of opportunity are classroom interaction and management".


"This report argued for comprehensive and co-ordinated action to provide more equitably for girls and boys, particularly in terms of developing girls' confidence, self esteem and marketable skills. The report recommended the development of a comprehensive national policy dedicated to improving schooling and its outcomes for girls, arguing that such a policy would provide the necessary directions for change and for co-ordination of effort". (National Policy 1987:v).
Focus of the Report:

The four major issues considered for the education of girls were Schooling Processes and Structures; Curriculum; Science, Mathematics and Technology, and the implications of Schooling for Employment.

Comment:

It is a superbly written report particularly the review of the research findings and moderate gains in the eight years since Girls, School and Society (1975).

The report argued from two major perspectives: the economic utilitarian and the waste of ability; and the social injustices to the individual because of gender and sex stereotyping. They saw the school as a major agent of change.

Government Policy (1975-83)

The committee perceived growing political support -

"By 1983, the major political parties in Australia espoused equality for women in their policy statements" (Girls and Tomorrow 1985:2)

Equity and Schooling:

A rather depressing picture was presented on the relative lack of progress in countering educational disadvantages suffered by girls and a greater range of sources was identified. (Girls & Tomorrow 1985:3)

Girls and the Labour Market:

The link between educational disadvantages and labour market disadvantages was clearly related (Girls and Tomorrow 1985:3).

The OECD found that Australia in 1977 had the highest level of occupational segregation by sex of all the countries studied. (See Girls and Tomorrow 1985:4 Table 1.1).

Long Term outcomes show that many Australian women "are not equipped by their education to shoulder economic responsibility" and "may remain dependent and powerless all their life". (Girls and Tomorrow 1985:3 point 1.11).

Girls' under-participation and under-achievement in mathematics, the physical sciences and technology was highlighted as a major limit on their post school employment and further education options. Girls' under-participation in mathematics was associated with limiting their participation in the whole computing field. Thus identifying a further cause for concern in limiting the future life chance of girls.

Girls participation in schools had increased, but the education of males in the (15-19) and (20-24) age group was markedly higher than females (Girls and Tomorrow 1985 Table 1.2).
SCHOOL AS A PRIME AGENT OF CHANGE:

The working party agitated that Social forces that limit girls' options, their curiosity, their speech and their space should be broken by schools. Based on a firm research data base (See Chapter 3, 4, 5, 6), the working party set out six major recommendations (1985:9-14):

1. **A National Policy:**

"Which contains a strategic commitment to equality of educational outcomes for girls ... to transform rhetoric into reality" (1985:9).

2. **School organization:** (See also 1985:22-26)

As it affects girls' self esteem and aspirations through processes that reflect different standards and expectations of girls and boys; the timetabling of subjects which limit girls' choices; the allocation of students to subjects and levels on the basis of gender; and the structure of schooling that relegates women to the bottom of the hierarchy of power and influence. (1985:10).

3. **Transformation of the curriculum:**

"As a whole is required to eliminate sexist assumptions about the social and economic roles of women and to emphasise knowledge and skills which are valuable to males and females alike. The curriculum should provide all students with life skills which draw together skills taught in sex stereotyped courses, such as Home Economics, Technical and Business Studies. The curriculum should prepare students for all aspects of life including work, leisure and family life. it should both inform students and assist them to develop sufficient self esteem to sustain them whatever their fate in the world of work". (1985:11) See Also 1985:27-31).

4. **The Teacher's Role:**

"Students' self image, self esteem and aspirations are profoundly influenced by teacher attitudes and behaviours". Action then should be taken to "assist teachers and trainee teachers to recognize and rectify assumptions and behaviours which disadvantage girls". (1985:12) (See also 1985:32-36).

5. **Research:**

A need for an adequate research base, particularly in several critical areas, including teacher practice and prejudice; girls' under participation in Science and Technology; the influence of career counselling and sex bias in language used in Schools. It was also noted that the level of funding was unacceptably low (1985:12) (See also 1985:15-21).
6. **Implementation:**

That "the Commonwealth Schools Commission prepare a plan of action which provides for the introduction of strategies identified in the foregoing recommendations. It is also imperative that State Education departments, school systems and individual schools also prepare plans of action to remedy inequities in present practices". (1985:13).

The plan of action would include:

- a statement of goals and objectives and strategies ... involving the participation of women and men in all stages of implementation and assessment.
- arrangements for consultation and co-operation with State/Territory education departments and authorities, government and non-government school systems, teacher unions, parent organizations; State and Territory education department/authority women advisers, the office of the Status of Women, the Commonwealth Tertiary Education Commission and Technical and Further Education Authorities.
- a firm timetable for implementation.
- costing and resources for implementation.
- mechanisms and measures for monitoring, evaluating progress.
- methods for reporting and disseminating information on the results of the action taken.
- measures to assist education departments, school systems and individual schools to prepare their own plans of action.
3. **COMMONWEALTH SCHOOLS COMMISSION 1987**

A NATIONAL POLICY FOR THE EDUCATION OF GIRLS IN AUSTRALIAN SCHOOLS:
(May, Canberra).

There was a hope expressed in *Girls and Tomorrow*, 1985, that a National Policy on the education of girls would provide a blue point for change - and this came to fruition in 1987.

"This Report is about education for a society where women and men relate to each other as equals, unconstrained by factors relating to gender". (1987:1)

**Procedure of the Commission in their fact finding:**

The commissioner used the comprehensive findings and recommendations of the *Girls and Tomorrow* Report as a basis of their formulation of a National Policy.

They also gained a comprehensive and realistic understanding of the educational experiences of girls from extensive visits to both primary and secondary schools across the nation. The Commission noted that the willingness of Education Authorities and interest groups to co-operate had demonstrated a positive commitment to improving the education of girls (1987:v).

Most importantly, the Commonwealth Government stated that the development of such a policy for the education of girls was an important part of its National Agenda for Women which would span 15 years. (1987-2002). The Commission in their policy gave attention to significant questions of process as well as content.

The Commission highlighted the special problems of "Rural" girls and significantly cautioned about the reverse working of gender stereotyping with Aboriginal boys and their subsequent employment (1987:7). They note significant improvement in the quality of schooling for girls in "almost all schools", which was happening "with the support and commitment of the Principal and Senior Staff" (1987:7).

The Commission identified and acknowledged:

1. **Deficiencies in the relative resources available to girls, the amount and quality of interaction with teachers and the quality and relevance of teacher education.**

2. **The effects of inequities in schooling on the lives of individual girls and women and on their contribution to the social and economic life. This having been addressed by government and school authorities here and overseas.**

4. National policy in education which addresses "matters of concern to the nation as a whole in which a comprehensive approach to policy development and implementation is adopted by school and system authorities across the nation."

"A National Policy, based on principles of collaboration and partnership, necessarily involves commitment and agreement from the various parties responsible for schooling, including Commonwealth, State and Territory governments and non-government school authorities" (1987:11).

5. Significant educational initiatives and gains over the past decade, despite information gaps, limited support services, lack of funding and resources for schools, including professional development of teachers. (1987:11 & 37).

6. Gains have resulted from activities designed to raise:

(a) Self esteem and confidence in girls
(b) Participation and performance of girls across the curriculum
(c) Awareness and elimination of stereotyping on the basis of gender
(d) Awareness of teachers' and pupils' treatment of boys and girls in school and classrooms.

7. The fundamental importance "of the development of teachers' skills and understandings in this area; the need for explicit consideration of educational needs of particular groups of girls and the relationship between gender and other factors affecting educational attainment, arising from differences in ethnicity and socio-economic status, from geographic isolation and from physical and intellectual disability; the need for recognition of the educational significance of the early childhood and primary school years, and of the role of parents in education; and the implications of the National Policy for the education of boys, particularly those being educated in single-sex schools". (1987:13)

8. The measures which schools can effect in countering prejudice and discrimination of present and past times to enhance educational motivation, aspirations, expectations, opportunities and achievements. (See Appendix A 1987:73-78).


10. That the education of girls with disabilities "raises difficult and sensitive issues", and the need for research and data collection in consultation with disabled women and girls.

12. The educational disadvantages faced by many groups of girls compounded by geographical isolation – including girls from ethnic minorities, Aboriginal communities and poorer homes. The crucial need for additional resources and parental links for girls with special needs is emphasised. (1987:22-23).

13. The NAEC/CSC contribution to identifying the priority areas of need for Aboriginal and Torres Strait Islander girls, namely:

- cultural adaptation, maintenance and preservation
- positive racial attitude change
- double oppression issues
- courses in self esteem based on cultural identity.

Together with, a number of broad objectives, priority objectives and objectives related to professional and administrative procedures (1987:90-91).

CONCLUDING STATEMENT ON THE NATIONAL POLICY FOR GIRLS:

The Commission made seven major recommendations (See Appendix A of this report) where the emphasis was on the ideal supportive social situation, educational provision and curriculum for both boys and girls to allow similar chances of school success. (1987:69-72). At the heart of the recommendations is a quotation from the NAEC supporting the current research into an "all Inclusive Curriculum".

"Children must be educated to take their place in a multicultural society; to be able to achieve some objective view of the strains and tensions inherited in it; to be able to strike a balance between preserving their cultural and personal identities and yet contribute sufficient of both for the good of the whole". (1987:83).

4. OTHER REPORTS OF SIGNIFICANCE TO WESTERN AUSTRALIAN EDUCATORS:


Known as the Beazley Report: this inquiry into education published in 1984 was an important document for establishing the future direction of WA schools in an era characterized by technological change.

Policy for the Education of Girls (1987) and its recommendations for girl and other special groups in need is sensitively addressed. Their recommendations especially for girls (Beazley 1984:16, 341-349) integrate and meld well into those of the National Policy.
The Report of the Senate Select Committee on the Education of Gifted and Talented Children 1988:

"In May 1987, The National Policy for the Education of Girls in Australian Schools recommended changes to allow boys and girls similar chances of school success. These changes will not, in themselves be sufficient unless they also cater for the girls' individual differences. If they do, such changes will also benefit gifted girls ... entry to special programs and the curricula and organization of these programs should provide equal opportunity for girls and boys". (1988:115)

The report presents interesting findings with regard to gifted girls; that the courses they choose, lead to less rewarding careers; that girls are significantly more likely than boys to continue their schooling until Year 12; that they are less likely to attempt Mathematics and Science for their final school examinations, though participation rates are gradually increasing; that the difficulties faced in identifying and nurturing excellence are similar to those faced by girls as a whole; and finally that the hidden curriculum has an invidious effect on their non-success in mathematics and science. Aspects of the hidden curriculum include teachers attitudes, the length of time teachers spend with boys in preference to girls, boys' "dominance behaviour" over girls and a male-oriented curriculum.

Dr Sampson also observed:

"Problems also fall roughly into three principal areas all reflecting the influence of the hidden curriculum, namely, aspects of classroom interaction including teacher perceptions, the lack of confidence or self esteem in many girls and the lack of female role models for leadership or excellence in either school or society at large". (1988:115).

CONCLUSION:

Though this analysis of reports appears to be selective, many of the insights of other reports have been encapsulated in these major reports on the Education of Girls. The National Policy for the Education of Girls has listed all the relevant reports here and overseas in Appendix C of the document (1987:93-94).

We now have a heritage of a decade and a half of well substantiated reports on the education of girls, yet their impact appears to be minimal in terms of implementation in the schools nationwide.

RECOMMENDATIONS WITH REGARD TO POLICY MAKING, IMPLEMENTATION AND EVALUATION MOVING TOWARDS A GENDER INCLUSIVE CURRICULUM:

It is recommended that faculty members of the School of Education:

- regard gender equity as a key concern that is on-going and progressive, and may be monitored in the treatment of women teachers from the 19th century to the present day.

- be knowledgeable about the history of the education of girls and women since the 19th century.
acknowledge that women's contributions must become an integral part of the content by identifying the women who contributed to their specialized field of knowledge and include them in references to the students and in lectures, (particularly in the fields of humanities, literature, the arts, education, science, technology, mathematics and computing).

reflect on their own academic progress and the multifarious nature of the women's role in society today.

regard gender as a key individual difference that can, through adverse evaluation based on sex stereotyping, unconscious discrimination and disparate educational opportunities, be of great detriment to the individual and the achievement of their potential and feelings of self worth in the college, schools and societal settings.

be conversant with the major Australian reports and the National Policy addressing the education of girls: their recommendations, plans of action and strategies for implementation and evaluation.

be familiar with Australian Reports on individual differences in girls so that the effect of race, aboriginality, socio-economic status, ability level and degree of isolation may be recognized as contributing factors which may exacerbate the problems faced by girls and women in education.

be conversant with the Beazley Report and the recommendations for the education of girls in Western Australia.

actively create a balance of images of the teacher by encompassing the principle of reducing sex stereotyping in areas that are traditionally "male" or "female".

For example,

- in a future prospectus for teacher education there should be careful monitoring of the "models" we use to illustrate the teacher's role.

- in actively encouraging male and female lecturers to work together in presenting lectures on an equal partnership basis.

- provide examples that will interest both male and female student teachers.

- cater for different cognitive and learning styles.

submit to the Head of School a collation of initiatives already being implemented to actively counter inequities due to gender within their departments, including ways student teachers are prepared in creating gender inclusive curricula in schools.

should establish networks between their departments and the schools, if they are to take the issue of gender equity to heart for the well-being of all individuals.
need to establish links and dialogue with the Ministry, Independent Schools and Catholic Commission to ascertain what their guidelines are with regard to gender inclusive curriculum and the education of girls in particular.

investigate the on-going progress in the schools with regard to gender and the education of all individuals. For example, Home Economics and boys, Mathematics, Science, Computing and Girls, English Literature, Sport and girls, to gain a balanced profile.

need to develop a School of Education policy document indicating the direction of education in enabling the teacher and students to meet the challenges of the 21st century.

establish a "think-tank" with regard to formalizing a philosophy of education for teacher education in order to meet the challenges of the 21st century. For example a merger of post modernism and feminist philosophy may be considered as a basis for 21st century education.

initially establish in the policy preparation what it is that women wish for themselves and future generations of women.

agree that any debate on the gender issue be firmly based on a currently acceptable feminist framework that will meet the needs of both men and women, girls and boys.

carefully consider the needs of girls with differences due to aboriginality, ethnicity, social class and degree of isolation, lest we impose a middle class feminist perspective or restrict the needs of boys.

establish a dialogue with South Australian College of Education with regard to their policy on gender equity.

become conversant with the works of Dr Dale Spender, especially with regard to issues of language, communication and adopting a world ecological viewpoint.

be inserviced in the area of gender inclusive curriculum, to assist in the formulation, implementation and evaluation of the current educational policy adopted by the School of Education.

carefully monitor the current trends and action research in establishing gender inclusive curricula in all areas of knowledge both in college and the schools.

need to monitor the implementation of recommendations for the education of women and girls in each department.

be encouraged to introduce the innovatory academic discipline of "Future Studies" which deals with the process of change, alternative thinking choice, self concept, values and the development of optimistic images of the future. (Cornish 1977).
consider the 21st century may well see more sharing in parenting roles that are now traditionally women and men's roles, and so in planning curricula we need to look carefully at the whole issue of equity for both girls and boys for careers, parenting and other social responsibilities.

recognize accouchement leave as a valued time for women to enjoy their child and acknowledge this as a period for regeneration and learning.

consider that men too may profit from a time of "homemaking" for refreshment, learning in a new setting, and sharing in child rearing as a natural course of events.

model "gender inclusive curriculum" and all it implies: for leadership organization, recruitment of staff, deliberation of curricula, its planning, implementation and evaluation.

be actively encouraged to fully enter the debate on gender in a scholarly manner and follow the progress of gender inclusive curricula in the 1990's. This may be enhanced by:

(a) visits from eminent scholars in the fields of women's studies, philosophy of education, knowledge and control.

(b) communication with teachers and other policy making bodies.

(c) the acquisition of books in the area and the dissemination of key information concerning such publications.

(d) dissemination of the findings of action research related to gender in schools and places of higher learning.

(e) careful monitoring of the "education of girls" under the umbrella of equity for all individuals.

(f) becoming increasingly aware of the "construction of reality" in their own areas of specialization in building up bodies of knowledge, processes of problem solving, productive thinking and creative research, which may be devoid of the feminine perspective.

(g) periodic in-service training as perceived needs arise in the area of "gender-inclusive curricula" and their personal, professional development.

REPORTS, WITH PARTICULAR REFERENCE TO THE EDUCATION OF GIRLS IN AUSTRALIA


Education in Western Australia: Report of the Committee of Inquiry into Education in Western Australia. (1984). (Chairperson Mr Kim Beazley).
Assessment in the Upper Secondary School in Western Australia: Report of the Ministerial Working Party on School Certification and Tertiary Admissions Procedures, Perth, Western Australia. (Chairperson Professor Barry McGaw)


Ministry of Education (1987), Better Schools in Western Australia: A Program for Improvement. Perth WA.


TOWARDS A NEW PHILOSOPHY OF EDUCATION:

We need to take a fresh look at our belief and value systems and the current philosophies of life and education, that hold a belief and value system that enhances the partnership roles of men and women. We need to reconstrukt our philosophy of education so that it truly welcomes women and girls into the areas of formal education, otherwise the education of girls is always going to be a vulnerable "add on" rather than an integral part of the educational curriculum for the 1990's and the 21st century.

INTRODUCTION:

A disturbing chapter in Sherman and Woods (1982:130-145) highlights the way in which Western Society, through the family, schools, the media and other institutions such as the church, constructs the feminine female and the masculine male. The authors conclude that the costs of these sex role expectations is heavy for both, especially women. Evans (1986:74) in her paper 'Living Curricula' concentrates on the central importance of adults in school communities shaping the way girls and boys, become men and women. Although she gives more emphasis to the effect on girls, she finds it "impossible to understand and explain gender relations without juxtaposing masculinity and femininity, historically and logically they are coexistent".

Sutherland (1981:201-204) devotes time in her book on Sex Bias in Education to review the education of boys:

"It would be unreasonable to suggest that changes are to be made only for the benefit of girls' education. From what has been said so far it emerges that boys also are far from receiving the ideal education "(1981:201) ..." the elimination of sex bias in education gives the most promising prospect for the cultivation of individual talents and the expression and recognition of differences between people" (1981:223).

In their concluding statement Sherman and Woods (1982:144) write:

"A superior task would be for society, in the future, to construct the full human being. In fact, this is one of the central goals of the women's liberation movement, which has pioneered significant reforms in areas such as health care, including new child birth practices, and has provided support for women's education, occupational advancement, and political awareness" Sherman and Woods (1982:144).

Gray (1984) points out a number of policy and curriculum initiatives which might be undertaken to enhance the valuing of girls and women by society and themselves. A key area of consideration is the concept of a feminist, rather than a non-sexist, curriculum directed towards valuing the role of women. Such a curriculum, Gray argues would assist both boys and girls to engage in non-traditional activities without being expected to give up their gender identity. Such a situation would be beneficial not only for the individuals concerned, but for a more humane, caring and productive society.
Feminist Perspectives:

Chadbourne (1983:2) wrote a challenging article "What is it that Women Want?" This, I believe, is a key question which deserves full consideration by both men and women, in order to establish a vision of the future roles of men and women in the 1990's and into the 21st century. It is also central to curriculum considerations for appropriate education for our children. Chadbourne, in his second year external module Sexism and Society, has provided a number of articles and references that clarify the ideological beliefs of the major feminist frameworks, their modus operandi and the future changes they consider necessary in the field of work, the family, education and sexuality to eliminate the 'roots of oppression' for women.

A close study of Jaggar and Struhl (1978) not only provides a clear account of the 'roots of oppression' from the five perspectives of Conservatism, Liberalism, Traditional Marxism, Radical Feminism and Socialist Feminism, but also a basis for the reader to clarify, affirm and even reconstruct his/her own sociological framework. Educators, having studied these feminist perspectives, may then begin to incorporate some of these beliefs and values into their own philosophy of education making it more consistent with a gender inclusive vision of human endeavour, which takes into account recent social, technological and economic changes (Cross 1989:38-43; Littleford 1989:273). Additionally with a knowledge of feminist frameworks and philosophy one is able to see more clearly reasons for their lifestyle, lines of research, current innovations and pressures for further educational change.

It would appear that the Socialist feminist perspective is presently the most acceptable framework. It incorporates in a less extreme way, the views of liberal, marxist and radical feminism, and hence enables the opening of the debate between men and women by "bringing to light that submerged side of human discourse, namely feminine discourse, so that important facets of culture and morality may be approached with a sense of freshness, vitality and reasoned sensibility". (Devitis 1987:3)

THE ROOTS OF WOMEN'S OPPRESSION:

Jaggar and Struhl (1978) identify the roots of women's oppression in terms of historical antecedents and in biological and social conditions that continue women's subordination today. A clear understanding of these roots of oppression then effectively leads to "which facts or institutions must be changed in order to effect a significant and permanent increase in women's capacity to choose".

CONSERVATISM:

Is an essential framework for feminists and enlightened Western Scholars to understand the underlying philosophy and current dominant trends in Western Civilization. It helps in our understanding of the dualist, abstract and individualistic psychological ideas that are predominant in this philosophical position.
The conservative view of the women's situation in society is not feminist, because it denies that women are oppressed. It espouses the notion of an essential and biologically determined human nature. The belief that there are universal psychological differences between sexes, from human biology that are natural and unchangeable.

Aristotle in his writings on human biology (Littleford 1989:274; Katchadourian 1985:472) blatantly asserts that in the reproductive process women provide a passive and base material receptacle for the male sperm, which is active, forming and purely spiritual. Supporting this, Goldberg (as cited in Jaggar and Struhl 1978:81) argued that the presence of testosterone in men is the justification of greater aggression and universal domination by men. Frend, too, believed that "anatomy is destiny" and this belief has been used to justify keeping women in their traditional places. (See also Figes, E. (1986) Patriarchal Attitudes)

There has been a general failure on the part of Western Scholars to see and act upon Aristotle's misogyny. At the heart of feminist philosophy is an attempt to illuminate the fallacies in traditional dualist philosophy born out of Greece, which has enhanced and nurtured the belief in Western Capitalist Societies that women are born subordinate to men and the objects of denigration, control and subservience. (Jaggar & Struhl 1978:79; Littleford 1989:274). Many of Dewey's works then are of great potential value to feminist scholars. Dewey's philosophical thought aimed above all at re-integrating the dualities in Western Thought. In Democracy and Education (1916:141) he began a trenchant critique of the psychosocial effects of the separation of thought (mind) and activity (body) in the classroom with: "it is impossible to state adequately the evil results which have flowed from dualism of mind and body, much less exaggerate them". (Cited in Littleford 1989:279).

Feminists have argued that Aristotelian thoughts on gender are "grimly misogynist" and his ideas have had enormous influence upon Western scholarship and the taken for granted assumptions of everyday life. The extremity of Aristotle's degradation of women is revealed in his political writings (Okin as cited in Littleford 1989:274).

"It is a general law that naturally dominant elements and naturally dominated elements exist ... the rule of free men over the slave is one type of domination, that of man over woman is another". (Aristotle, as cited in Jaggar and Struhl 1978:79).

The writings of Tagliacozzo (1958), Morris (1973) and Gross (1980) are also concerned with the fascist possibilities in Aristotelian trends in both state and church, especially in times of rapid social and institutional change. This they say, has the tendency to raise up personalities who are "repressive, tyrannical ... inflexible and reactionary" leading to active, violent suppression. (Littleford 1989:274).
Pateman (1987) and Smith-Rosenberg (1987) elaborate upon how Aristotle’s views on gender persisted virtually unquestioned and unreconstructed throughout the development of the egalitarian and democratic philosophy of the Enlightenment and the reforms that accompanied it in the 19th century. Within this “liberal-democratic” paradigm, scholars from Rousseau, Hegel, Freud to those as contemporary as Talcott Parsons and Eric Erikson “reclaimed all to the status of adult personhood, except women”. Even John Stuart Mill failed to challenge Aristotle’s functional view on the family as he developed his writings on the desirability of gender equality. (Littleford 1989:275).

Feminist scholars conclude that this persistence of extremely misogynist attitudes from Ancient Greece is deeply involved with several interrelated dualisms:

- the split of the private domain of female domesticity and the public domain of masculine justice and production (Pateman 1987 as cited in Littleford 1989:275-6)
- the dualism of matter or body, tacitly or explicitly identified with women; and spirit or mind with men.
- an alienating and unhealthy duality of psychological and social aspects of human existence; “which have wreaked its own havoc upon attempts at human liberation”. (Smith Rosenberg 1987 as cited in Littleford 1989:275-276)

Conservatism and Work

Pronounced sexual division of labour in contemporary society is seen as a natural expression of the biological differences between men and women. Tiger and Fox, cited in Jaggar and Struhl 1978:169; emphasise "the different emotional, intellectual and social skills and enthusiasm" as a basis for what they maintain is a virtually universal division of labour. They however ignore the highly diverse women's role in World War II (Hall 1985:20-30) and the effects of socialization (Sherman & Woods 1982: chapter 8).

Conservatism and the Family:

Conservatism takes as biologically given, the monogamous, nuclear family and attempts to defend on biological grounds the traditional division of labour between the sexes; the domesticity and child caring of the woman and the man's role to "protect against the outside world and to show how to meet this world successfully". Supported by Tiger and Fox and Bruno Bettelheim, they claimed women are equipped for the physical and emotional care of children as a result of pregnancy, birth and breast-feeding, men thus are not, their function in society is "moral, economic and political". The main fear is that 'feminism' will destroy the family. Feminists belief that the women's position in the family must be radically changed as a pre-condition of liberation (Jaggar and Struhl 1978:219).
Conservatism and Sexuality:

Biology dictates a sexually active and aggressive role in man and defines the woman as sexually passive. "The conservative view of male sexuality offered by Anthony Storr seems to justify male sexual behaviour bordering on rape". (cited in Jaggar and Struh 1978:273) Conservatives warn that deviation from these sex roles will produce disharmony and trauma. David Allen argues that the contemporary redefinition of the women's role has seriously undermined male/female relations. Increased freedom has tipped the natural balance in relations between the sexes and has done tremendous damage to the male sex image. (Jaggar and Struh 1978:273). Homosexuality and Lesbianism are regarded as abnormal and unhealthy.

LIBERALISM:

Liberal Philosophy has its origins in the "social contract" theories of the 16th and 17th centuries. It was not until 1792, that Mary Wollstonecraft published a Vindication of the Rights of Women, when she argued that women's rights should be equal to those of men on the grounds that women were "equal possessors of the capacity to reason". She believed that the apparent inferiority of women's intellects was due to women's inferior education.

Her disciples all stress "equality of opportunity". Taylor and Mill (19th century) argued for the same legal rights and the same educational opportunities as men. Betty Friedan and Gloria Steinem argued in the 1970's against sexual discrimination in the same way.

They do not deny there may be innate inequalities between persons in general, but suggest that the psychological differences may be learned rather than inherited, judging by the inequality in opportunities and education.

They do not criticize the social inequalities in wealth, power and position, only their distribution on the grounds of inheritance or other irrelevant characteristics, such as family, race or sex. The proper reward for such talent should they believe be determined by "the market demands for that talent".

They believe when sex discrimination is eliminated, women will be liberated. (Jaggar & Struh 1978:79).

Liberalism and Work:

The liberal feminist is less concerned with the origins of sexual division of labour, but in bringing about equal treatment of all members of society. They argue for equal opportunity of all human beings to acquire education and training commensurate with their ability and open opportunities to use that training in the work force, irrespective of gender. This view is in line with their belief in individual self-fulfilment and distributive justice. They speak of the general advantages that will accrue with the greater use of women's talents. (Jaggar & Struh 1978:170). Their thinking is based upon Adam Smith's classic belief that "the invisible hand of providence working through a market economy will coordinate selfish strivings"
It is the Liberal Feminists who strived for obtaining legal equality for women.

**Liberalism and the Family:**

Betty Friedan's (1964) *The Feminine Mystique* attacked the conservative view that "women could and should find their supreme happiness and fulfilment in domesticity" (Jaggar and Struhl 1978:220). The women's movement led liberal feminists to write critiques of the assumption that women are uniquely suited for housework and child care. The 20th century liberals have extreme tolerance with the "rightness of every type of living arrangement", whilst holding an uneasy compromise that family life is both private and political. Ann Crittenden-Scott speaks of the viability of the occupation "homeworker", with payment by the spouse and Alix Kates Shulman espouses the idea of a contractual liberal approach to marriage, with the freedom to choose roles. (Jaggar and Struhl 1978:220).

**Liberalism and Sexuality:**

Sexual expression and liberalism, emphasises enjoyment, choice, and non-exclusivity of sex roles. Private life is not considered subject to public life and there is a tolerance for Lesbianism and Homosexuality. They perceive, "Individual fulfilment through varied experimentation and on equal opportunity to pursue pleasure without strictures of highly defined sex roles." (Jaggar and Struhl 1978:274-5).

**TRADITIONAL MARXISM:**

It is a believe that the system of private property and class determination is at the root of women's oppression. This tradition rejects explicitly the notion of an essential and biological determined human nature:

"What persons are like - their motivations, interests and abilities and even their needs is very largely a function of the form of society in which they live and of their place in that society. People create social organizations and hence they are the ultimate and active creators of their own nature". (Jaggar and Struhl 1978:83).

The Marxist locates the origins of women's oppression in a particular system of social organization originating with private ownership, by relatively few persons, all male, who instituted a class system. Sexism, then, for the Marxist, is a secondary phenomenon, where prejudice against women will disappear when the means of production becomes the property of society as a whole.

**Traditional Marxism and Work:**

Traditional Marxism opposes the discrimination that keeps some women out of the industrial work force and relegates others to the lowest status of the force. They believe that this discrimination can not be eliminated as long as Capitalism exists. The Marxist argues that sexism, in the form of discrimination against women worker, is not accidental but a necessary aspect of Capitalism. Women are therefore urged to join the working class and, with men, overthrow capitalism.
Margaret Benston cited in Jaggar and Struhl (1978:172) provides a contemporary version of Engel's analysis of the relation between women's work and her status in society. Benston asks the question whether women's labour occupies a unique position in the total economy. She concludes that they are totally responsible for housework which is not considered "real" work, thus it must be industrialized in order to be valued as significant and to eliminate economic dependence on men. Women must be integrated into the public labour force if their oppression is to be removed. Marxists also believe it is important to expose the inadequacy of mere legal equality, if we "leave untouched the inequalities of power and wealth that have a fundamental determining effect on people's lives" (Jaggar and Struhl 1978:172).

Traditional Marxism and Family:

Traditional Marxism locates the roots of women's oppression with the monogamous family. Monogamy tends to traditionally have the meaning of "emotional and Sexual exclusivity", but for Marx and Engels it is used "technically to denote the marriage of a man and women in which the man controls the family's wealth" (Jaggar & Struhl 1978:221-2). When Marxists, like Engels, recommend the liberation of women from monogamy "they are recommending the abolition of an economic institution, rather than an emotional, sexual arrangement" - since it is founded on "the open or concealed domestic slavery of the wife" (Engels cited in Jaggar and Struhl 1978:222).

Lenin's 'On the Emancipation of Women' advocates housekeeping's "wholesale transformation into a large scale socialist economy" (Lenin, cited in Jaggar & Struhl 1978:222). The Marxist, however, devotes little attention to the family's emotional and ideological function, save for advising men to "assist in lightening women's household burden" (Jaggar and Struhl 1978:223).

Traditional Marxism and Sexuality:

The position on sexual fulfilment most consistent with Traditional Marxist theory is that taken by Engels when he maintains that a definition of non-exploitative mutually fulfilling sexual relationships must await the time when differences in power and wealth no longer separate men and women. (Engels cited in Jaggar and Struhl 1978:275).

RADICAL FEMINISM:

What distinguishes Radical Feminism from all other feminist theories is the insistence that the oppression of women is fundamental:

1. Women were historically, the first oppressed group.

The Historian Theodore Roszak has affirmed that women are the prototype and the alpha and omega of oppressed groups. "Deeper down than we are rich or poor, black or white, we are he or she" (Rosak and Roszak 1969:94)
2. Women's oppression is the most widespread, existing in virtually every known society.

"Women were indeed the first niggers in history and are still apt to be the last liberated" (Roszak and Roszak 1969:99).

3. Women's oppression is the deepest and hardest to eradicate and cannot be removed by other social changes such as the abolition of class society.

4. Women's oppression causes most suffering to its victims, both qualitatively and quantitatively, although this suffering may go unnoticed because of sexual prejudices of both the oppressors and the victims.

5. Women's oppression provides a conceptual model for understanding all other forms of oppression, such as racism and class society.

Shulamith Firestone's The Dialectic of Sex contains the classical Radical Feminist account of the roots of women's oppression. She believes that these roots are ultimately biological, grounded in the fact that women's child-bearing function made them dependent on men for physical survival ... but she argues this can be changed by technology. She outlines recommendations for future of work, child-rearing and sexuality.

Charlotte Bunch believes that women's sexual subjugation was the first form of women's oppression and the deepest ... for Bunch, lesbianism is mandatory and is not merely a personal preference but a political decision made within the context of a political struggle. (Jaggar and Struhl 1978:83-84).

Some of the most thought provoking and disturbing themes in Devitis's, Women, Culture and Society (1987) illuminate and elaborate upon Roszak's suggestion that women are the prototype and the alpha and omega of oppressed groups. (Littleford 1989:274).

Radical Feminism - Work:

Work is regarded as one of the many areas which reflect the deeper biological/psychological antagonisms which lie at the root of the women's situation. (Jaggar and Struhl 1978:172).

Radical feminists feel they must direct attention to the totality of cultural institutions and relations that define women's subordinate status. Jennifer Woodul (cited in Jaggar and Struhl 1978:173) sees feminist businesses as an important way for women to gain actual power. Women therefore need to learn about every aspect of business life and to create new structures and organizations that permit women to work together in a non-exploitative way. The prime motivation of the Radical Feminist is to enable business women to make significant changes in the existing system.

Radical Feminism - Family:

Radical Feminists see heteroSexual marriage as the primary institution for the oppression of women, fundamentally because it is set in the context of an overwhelmingly sexist society.
Firestone's analysis of the roots of women's oppression are embedded in the prehistoric biological family. Radical Feminists urge the abolition of contemporary marriage, which Sheila Cronan describes as a form of slavery. Rita MacBrown proposes the establishment of all women communes, to enable women to define themselves independently of men, whilst discouraging the exclusivity and possessiveness of any kind of marriage. Only if sexism were eliminated could the possibility of heterosexual marriage be considered. (Jaggar & Struhl 1978:223).

Charlotte Perkins Gilman's Herland (1979) is a science fiction conceptualization of a utopian women's society, which encompasses an ideology of mutual caring, where each woman with her special gifts has a part in nurturing and educating the children to full personhood. It is their discovery by two men that presents the challenge of reintegration into a heterosexual society.

**Radical Feminism - Sexuality:**

All radical feminists agree that how we choose to define and explore our sexuality and develop more intimate (not necessarily sexual) relationships with women is a matter of extreme personal and political importance. The Radical Feminist struggles with the constraining oppressive notion that "emotional and sexual relationships with men provide the most important opportunities for fulfilment in women's lives" and leads women to define their achievement solely in terms of "being attractive to and pleasing men". This is extremely limiting to full personhood and prevents enriching relationships with other women and men to foster our process of becoming.
SOCIAL FEMINISM:

"Social Feminist theory of society is characterized by an emphasis on the inextricable interconnectedness of home and work, private and public, personal and political, family and economic system, women's oppression and class society, it attempts to synthesize the important insights of both Traditional Marxism and Radical Feminism while avoiding the inadequacies of both" (Jaggar & Struhl 1978:225).

Basically they accept the historical materialist approach begun by Marx and Engels, yet all Social Feminists agree that sexism is at least as fundamental as economic oppression and emphasise how capitalism and sexism reinforce each other. Their aim is to create a theory which demonstrates the inseparability of these two forms of oppression and the need to struggle simultaneously against both (Juliet Mitchell's 'Women's Estate' as cited in Jaggar & Struhl 1978:85).

Gayle Rubins gives a fascinating account of the origins of male oppression as rooted in the institution of kinship, using women in inter-familial exchange. This institution created and consolidated extra-familial ties. The cost was the sexual repression of both girls and boys, the imposition of the norm of heterosexuality and the social creation of a passive feminine nature. (Jaggar & Struhl 1978:85). The Socialist Feminists also believe that they should study the problems faced by women in different social classes and from different racial groups, and to analyse these problems in terms of class oppression and male privilege. The cautionary tale of Sutherland (1981:221) is a timely reminder of the way the relatively liberated position of women in Iran was rapidly and radically altered in recent history by men who held extreme Muslim religious and political views.

Social Feminists and Work:

They are as concerned with women's work in the home as in the industrial labour force. They argue the women's-plight in two ways:

(a) "Because women are taught to consider their roles as wives and mothers as primary, they accept lower rank jobs at disproportionately lower wages and can be marshalled in and out of the workforce according to the needs of the capitalists." (Jaggar and Struhl 1978:173) As Partington (1976:100-101) observed it was mature married women about to graduate as teachers and female teachers with families who were especially vulnerable groups in the 1970's with regard to future and continuing employment. Men were using the ploy that women could not make a whole hearted contribution to school life if they were married with family.

(b) "Domestic work is indeed work" "Understanding the nature of domestic labour and its role in maintaining the exploitation of the class society as a whole is a crucial task for feminist thinkers".

Demands for the state to pay wages for housework grew up within the women's movement in Italy "to give it status as real work" (Guiliana Pompei as cited in Jaggar and Struhl 1978:173). Carolee Lopate believes the whole institution of the nuclear family as a private sphere operating to buttress the capitalist society needs to be re-evaluated. (Jaggar and Struhl 1978:173).
Socialist Feminists - Family:

The most theoretical consideration of the functions of the contemporary family - economic, emotional and ideological - has been undertaken by socialist feminists. There is a valuing of the importance of family and personal life, which distinguishes their social analysis from Classical Marxists. They perceive the current values of authority, competition, jealousy and possessiveness inherent in the family all supporting the capitalist system. According to Gayle Rubins, the family is the primary institution that imposes social gender on biological sex, creating the typical masculine and feminine personalities. Barbara and Michael McKain (cited in Jaggar and Struhl 1978:225) believe it is vital to organize households in such a way as to encourage our liberation from the possessiveness, dependence and isolation of traditional marriage or couple arrangements. They say that children who are non-sexist, independent and able to establish close ties with more than one person will be able to develop only when they are free from these stated constraints of the traditional family.

Social Feminism - Sexuality:

Analysis of sexuality takes "explicit account of the fact that sexual interaction occurs within the context of a society, which not only is male-dominated, but is one in which those who control the wealth exercise disproportionate power". (Jaggar & Struhl 1978:276).

Therefore they believe how we define our sexuality is highly political and that much talked about sexual freedom is an illusion. They acknowledge that male privilege is so pervasive in our society that "loving sexual relationships with males are difficult". One ideal held is that of androgyny and redefining ourselves as complete human beings, all of whom are capable of 'independence and dependence', 'tenderness and strength', 'giving and receiving'.

"The genderless society is at least as necessary to women's liberation as is the classless society" Gayle Rubins (cited in Jaggar and Struhl 1978:277).

"The goal then of social feminism is to transcend sex role stereotyping and commercialized degraded and alienating forms of sexuality offered to us by the movies, books and advertisements. Once differences in power and wealth are eliminated from society it will be possible to achieve a genuinely liberated sexuality which has no goal or purpose other than the enrichment of human existence". (Jaggar & Struhl 1978:277).

Feminists in the 1990's:

Most feminists are dissatisfied with a merely negative struggle, realizing that "you cannot mobilize a movement that is only and always against you - you must have a positive alternative, a vision of a better future that can motivate people to sacrifice their time and energy towards its realization." (Alcoff 1988).
Three key articles in *Educational Theory, Summer 1989* are heartening since each demonstrate the way in which men and women are engaging in philosophical discourse, with the aim of preserving the best in our culture and education, but deliberately focussing on Democracy; ever conscious of oppressed groups and all supportive of a "transformed balanced curriculum;" with a vision of a new utopianism to counter the anti-utopian of the most radical educational theory. Hopefully it is a dialogue of equals.

**PHILOSOPHICAL DISCOURSE BY MEN AND WOMEN IN THE 1980'S:**

"Curriculum theories and feminist theories have been neglectful of each other's questions to the detriment of their theories" Yates (1987).

The Early 1980's - at the micro level of discourse Van Allen (1982) made a study of educational attitudes of faculty and students in the North Carolina community college system, measured in terms of "the dichotomy between traditionalism (associated with pedagogy) and progressivism (associated with androgyny)." Both faculty and student attitudes represented a moderate position on the androgyny - pedagogy dichotomy. Some attitude change towards common concerns is an essential starting point.

1. **The State of the Art:**

The late 1980's - at the macro-level of discourse. Sadker and Sadker (1989) using the 'Excellence in Education' paradigm produced a line by line content analysis of 138 articles on educational reform published in nine influential professional journals between 1983 and January 1987 which showed that the educational reform movement largely ignores issues of gender equity and that males outnumber females in authorship and in depiction in photos and illustrations.

The report concluded by making a number of recommendations to enhance equity in education within the "Excellence in Education movement" reiterating that unless gender was addressed there would be a continuing hinderance to the creation of talent and excellence in education.

2. **Bringing Values back into the Philosophical Debate:**

Despite the Sadker's sobering report, men and women are concerned either in collaborative work or within their own paradigms to reconstruct a philosophy of education that addresses human and aesthetic values. (Gray 1984; Reid 1986) (See also Strain (1971; 371, 374, 536).

"The teacher who stimulates and encourages the engrossed engagement of pupil's in whatever they are studying is teaching educatively and the outcome is educative learning. The aesthetic satisfaction it brings is the reward of the holistic approach to knowledge and understanding of many things of many kinds". (Arnaud 1986:141).
3. Democracy Revisited and the Role of Teachers as "Transformative Intellectuals":

Henry Giroux (cited in Kaye 1989:281) has a "stirring vision of schooling for democratic struggle and development". He sees schools as "one of the few sites within public life in which students, both young and old, can experience and learn the language of community and democratic public life" (Kaye 1989:286).

He sees citizenship as "a process of dialogue and commitment ... to overthrow relations which inhibit and prevent the realization of humanity" (for example, race, gender and class oppression). Giroux sees as anachronistic traditional schooling which uses a model from a functionalist framework, with institutions reproducing the social order (eg. the pattern of inequality). He comprehends education as "cultural politics" and schools as "public spheres" potentially fostering critical citizens committed to democratic practices, aspirations and development.

Giroux visualizes teachers as "transformative intellectuals" whose moral and political responsibilities are to engage and empower students through critical dialogue and experience, and at the same time to link schools to their communities in support of movement for progressive social change.

His views on the preparation of teachers are worthy of note (Kaye 1989:287).

4. Feminist Philosophical Perspectives:

It has been the challenge of philosophers like Jane Roland Martin, Ruth Jonathan and Maxine Green to "examine women's experience on their own terms outside existing paradigms and then to challenge those paradigms." (Foster 1989:29) They have increasingly developed credibility in the philosophical debate of our time. It is important to note the progress that feminist philosophers have made, considering that in Strain ed (1971) only one female philosopher and educator contributed to the discourse, namely Dr Maria Montesorri in her article The Child (1971:53-64).

5. Philosophical Discourse Between Men and Women in the 1989:

Two reviews deserve consideration, as each author steps into the paradigm of the other gender.

A. Michael Littleford's review of Devitis (1989) Women, Culture and Morality is incisive and generous. It is an exercise for him of mind and heart where he becomes involved in the "submerged side of human discourse, namely feminine discourse". He applauds the "penetrating cultural psychoanalysis" of the writers, which he believes is "essential to any hope of even beginning to abate serious social and political problems from modern warfare and global pollution to massive numbers of failed marriages and instances of child and spouse abuse" (Littleford 1989:273).
(i) The Impact of Aristotelian Philosophy on Traditional Modern Philosophy

"New light is being thrown on to the dualist and sexist structures that have stubbornly persisted in Western Culture since Ancient Greece". (Littleford 1989).

Okin (1987:214); Tagliacozzo (1958); Morris (1973); Gross (1980); Pateman (1987) and Smith-Rosenberg (1987) examine Aristotelian thought on gender, his extreme degradation of women and the Fascist possibilities in Aristotelian trends in both church and state in times of rapid technological and social change. Pateman (1987) and Smith-Rosenberg (1987) note how Aristotle's views on gender have persisted unquestioned and unreconstructed even within the egalitarian and "democratic philosophy of the enlightenment;" and finally the persistence of extremely misogynist attitudes in several inter-related dualisms. (These have been discussed in detail within the Conservatism and Radical Feminism framework in this report).

(ii) Psychological Health:

Professor DeVitis and Dr. Edward Jones examine the deleterious effects of separating psychological life from social realities. Littleford (1989:276) suggests that "Adler could be encompassed by feminist writers to strengthen their critique of dualist abstract and individualistic psychological ideas of the current dominant trend".

Johnson (1977) has already developed a Masculine Psychology using Jungian Psychological concepts and based on the legend of Parsifal and his search for the Grail. Bolen (1984) developed a Psychology of Women, emphasising the multifarious nature of roles, based on analogies of Goddesses in Greek mythology. It is interesting also to speculate whether Freudian and Neo Freudian psychology is the most appropriate theory for our understanding of Adolescents.

(iii) Dualism and Knowledge:

The last six essays in Women Culture and Morality further expose the hyper-masculine character of Western cultural developments and structures; and other forms of dualism are highlighted:

- between thought and action
- the abstract and concrete
- rational and non-rational psychic powers and processes are brought to light and criticised as they relate to gender problems in the context of Western education, epistemology, theories of human development, ethical issues and life styles. (Littleford 1989:277)

Their work builds upon the earlier work of Spender (1981) which was based on the premise that women have been excluded from codified knowledge in all its forms. Religion and other symbolic forms explain the world in terms of men (Roland's essay) (See also Figes 1986).
The collection of essays in Dr Spender's book explored several specific areas of inquiry in which feminist scholarship and Women's studies were beginning to change the male oriented curriculum and underlying research activities to establish alternative research processes and different curriculum content. As a result of this work some of the men's studies, including linguistic, philosophy, literary criticism, political science, sociology, education, media studies, law, history and psychology have been modified (Dr P Mares 1989).

The present work, Women, Culture and Morality is concerned about the masculine over-emphasis upon cognition, abstract knowledge and thought, and excessive individualism at the expense of community values in the educative process and in theories of ethical development (Martin; Gilligan; Sichel; Noddings; Ruddick and Sher as cited in Littleford 1989:277).

Littleford comments, "Each of them presents fresh and valuable feminine perspectives which can help balance the pathological dominance of masculinity which currently distorts our institutional processes and ideas and our personalities".

and continues

"These and the earlier essays in Dr DeVitis's work confirm the contention of the broader community of feminists that Western knowledge and culture in all its forms of symbolic expression require radical reconstruction to include previously excluded achievements and modes of thought of roughly half of the human species."

Littleford (1989) highlights the limiting effect of traditional philosophy on scientific discovery ... despite great scientists acknowledging the need for the holistic in pursuit of true discovery.

"Science ... means unresting endeavour and continually progressing development toward an aim which the poetic intuition may apprehend but which the intellect can never fully grasp." Max Plank (1936) The Philosophy of Physics.

"Imagination is more important than knowledge" Albert Einstein.

The four critically oriented essays by Martin, Gilligan, Sichel and Noddings (cited in Littleford 1989:277) suggest that R.S. Peters and Lawrence Kohlberg are "latter day rationalists".

(iv) The Educational Philosophy of R.S. Peters:

Peter's philosophy of the ideally educated person is defined almost exclusively in terms of the acquisition and purely formal acquisition of abstract and rational thought. The latter, presented in the usual dissected form of separate disciplines, is drawn from and reflects centuries of curricula designed by Western males.
Max Plank, the Physicist and Charles Sanders Pierce, the Philosopher declared that cognitive and analytical powers are encompassed by a far more inclusive, non-rational (or even transrational) field of processes which make learning and knowing much more complex than the mere development of structures for logical analysis. Pierce states quite bluntly from his and others' philosophical and psychoanalytic research and experimentation that:

"the non-rational or obscure part of the mind is infinitely wiser, more delicately sensitive and acts with greater accuracy than the rational part" (Littleford 1989:278)


Kohlberg's Theory of Moral Development:

Kohlberg assumes that moral growth depends almost entirely upon developments in the relatively narrow and limited domain of cognitive structures. The relatively closed and circular nature of the connections between Kohlberg's initial philosophical assumptions and his selection of empirical data (male subjects) to be included in research has resulted in a partial and sexist version of moral growth and actions.

Gilligan conceives Martin Luther King's vision of justice and right is solidly embedded in a communal context of responsibility and connectedness. A truly mature and androgynous development of his perspective, not recognized by Kohlberg, incorporates the female language of responsibility and the male language of rights, an integration, Dr Sichel, suggests may represent the fullest possible moral development. In summary, Kohlberg abstracts and emphasises the language of rights and a lone moral agent, while ignoring Martin Luther King's feminine language of community and responsibility.

Feminist Response to Kohlberg's Theory of Moral Development:

Littleford (1989:279) believes that like Adler and other minority thinkers, Dewey's many works are of great potential value to feminist scholars. Kohlberg's separation of thought and action is raised by Gilligan (1989):

"Rather than abstracting moral problems from concrete details and dynamics of their social and historical context, females tend to use all of their psychic powers to view the concrete ongoing situation holistically". (Gilligan as cited in Littleford 1989:279).

Dr Nodding's "ethic of caring" complements, parallels and elaborates on the works of Drs Martin, Gilligan and Sichel concerning the general patterns of feminine and masculine moral development. (Noddings 1984).
Littleford comments:

"Her comparisons of the ethic "caring" based on a sense of connectedness with others and characterized by concrete fluidity, with the lonely sense of isolation and abstractness typical of masculine ethical thought are meaningful and compelling" (Littleford 1989:279).

Ruddick's portrait of maternal thinking is an "appealing vision of socially powerful mothers liberated from the masculine establishment especially in the sense of ceasing unauthentic collusions with male power structures which result in their own and their children's subordination". Littleford (1989:279).

Littleford believes that Ruddick's ideas concerning empowered maternal mode could be further developed and applied to problems concerning exclusion of the reproductive, as contrasted with the productive, aspects of social life from the formal educative process and public world in general. Ideas integrating her "maternal thought" with ecology, law and related disciplines could help expand and balance school curricula, the justice system, marriage and family life.

She challenges the efficacy of conventional fatherhood with its harmful combination of the assumption of great power over children's lives with the failure to participate in concrete and attentive child care taking. Arnaud (1986) and Gray (1984) would support this perspective. The work of Lamb (1975) would be a valuable paper to revisit with regard to his views on fatherhood. Littleford (1989:279) however cautions against complete self sacrifice which "creates pestilence and retards the growth of all persons concerned. A person cannot completely and without resentment care for and be responsive to others - unless that person includes him or herself in the circle of care". Gilligan (1989) agrees with Sichel that a mature outlook demands a synthesis of the two cultural perspectives: the masculine emphasis upon individual rights and the feminine emphasis upon responsibility to communal concerns.

(vi) A Move Closer to Valuing the "Feminine" - by valuing the traditional female pursuits.

Littleford (1989:280) finds the paper by George Sher to be laudible since he systematically refutes the most commonly accepted arguments that women's traditional choices inherently lead to less fulfilling and prosperous lives and to the undermining of self respect.

"It is fallacious and unproductive to continue and sustain yet another aspect of hierarchical dualism which artificially bifurcates the social world into a private female realm of reproductive and domesticity and a realm of public masculine productivity".
The reclaiming of the validity of traditional alternatives from their degradation in recent history, if expanded and elaborated, has many potential benefits. ... it can help preserve the arts and crafts of home-making and child-rearing as acceptable and interesting alternatives for both genders, while reclaiming from obscurity the real, enormous and essentially economic values of activities such as home gardening, the preservation and cooking of food, interior decorating, clothing construction and informal education.

B. In parallel with Michael Littlefords (1989) active discourse in the domain of feminist perspectives, Carol Nicholson (1989:197) ventures into the world of the postmodernist, with the intention of finding solidarity with feminist philosophers and educators.

Post-Modernism, Feminism and Education - a Need for Solidarity:


- basically they believe the new modern age is "characterized by the coexistence of different cultures" Toynbee (1954)

- they are against the development of science, art and morality into separate disciplines, each operating according to autonomous methods and different standards of objectivity and truth.

- they attempt to undermine the privileged status of elitist art, the universal claims of Western Science and objective representations of dominant groups.

- they doubt the existence of privileged representations that can serve as a basis of knowledge.

- they question the possibility of 'objective' truths that are necessary, universal and unchanging.

- post-modernism emphasises the role of unconsciousness, reinterpreting knowledge as socially constructed and historically situated, instead of a timeless representation of the world by separate individuals. (Lyotard and Rorty cited in Nicholson 1989).

- they perceive the two major legitimizing narratives, in the modern age have been the story of the emancipation of humanity and the story of the speculative spirit, which have moulded our educational institutions (Rorty 1982).

- they have developed a new model of legitimization of knowledge to avoid theoretical errors of the grand narratives and implicit terrorism of systems, theory and bureaucracy. (Paralogy).
Lyotard sees "transformed education" in terms of producing skilled experts in computers, with didactics entrusted to machines and students at the end of terminals. Pedagogy includes computing and computer languages, training in "informatics" and "telematics" with the hope of free public access to all information "with everyone playing their own language game".

Jane Roland Martin (1981) challenges this view, claiming in education we convey more than knowledge.

Rorty believes it is a mistaken platonic assumption that "Truth exists apart from man and can be deleted by the proper use of the faculty of reason". (He draws on the ideas of Nietzsche, Gadamer and the American Pragmatists).

"We need to see education as in touch with our own potentialities" (Nicholson 1989:200) not "getting in touch with something non-human called Truth and Reality". Decent respect for the opinions of mankind, with a sense of tradition, community and human solidarity underlie his philosophy.

Rorty emphasises the triad of "books, student and the prestigious teacher-scholar".

Rorty attacks epistemological privilege, but remains relatively silent about political, economic, racial and sexual privilege. McLaren criticises his type of liberalism as "irrelevant and doomed" (Dewey).

Many post-modernists and their critics have neglected or underestimated the potential of the feminist movement to provide post-modernism with a utopian dimension and a political context.

Post-modern feminism, Nicholson believes, "integrate the strengths and overcome the weakness of the two traditions".

However, feminists do not identify themselves with post-modernists, but the two movements share important concerns and can not afford to ignore each other:

both raise meta-theoretical questions about the appropriate methods of interpreting human experience in a time of crisis.

both attempt to understand the self, knowledge and culture "without resorting to linear, teleological, hierarchical, holistic or binary ways of thinking and being".

Jane Flax and Craig Owen support post-modernism as a framework within which feminist theory can be further developed and the marginalized voices of women and minorities can find expression (Nicholson 1989:197). Feminist Postmodernism is intensely political (Sandra Harding).
The emergence of post-modern themes within feminism has resulted not only from people like Lyotard, Rorty, Derrida, Lacan and Foucault, but also from a new sensitivity to differences among feminists themselves. Women of colour, working-class women and women of other cultures have insisted that their experiences are quite unlike those of the white, middle-class educated women who have tended to dominate feminist politics. (Nicholson 1989: 202)

The necessity for post-modernism and feminism to learn from a critical encounter with each other. (Nancy Fraser & Linda Nicholson)

"If we are to carry post-modern theory into pedagogical practice we must listen to those who are telling stories about what it means to be excluded from a conversation or a community because their "heroes" or "heroines" are different from those of the dominant group. We need "rainbow coalition of post-modernists, feminists and educators who are committed to the task of making sure that no serious voices are left out of the great conversation that shapes our curriculum and our civilization". (Nicholson 1989: 204).

A Post-modern feminism that is sensitive to differences can serve as an important corrective to post-modern tendencies toward 'nihilism' on the one hand and "apologia of the status quo" on the other - it does not follow we should abandon educational institutions altogether".

Hannah Arendt in Crisis in Education wrote insightfully about the paradox of education in a post-modern era. (Nicholson 1989:192-3)

"Exactly for the sake of what is new in every child, education must be conservative, it must preserve this newness and introduce it as a new thing into an old world: however revolutionary its actions may be, it is always, from the stand-point of the next generation, superannuated and close to destruction".

The point of post-modern feminist pedagogy is not to destroy tradition but to give students the opportunity to reinterpret it for themselves in the light of new problems and perspectives.

Post-modernists emphasis the importance of educating students into a sense of community.

"The only way in which institutions of liberal learning can justify their existence is to be places in which students can find practically any book in the library and then find somebody to talk with about it". Richard Rorty Consequences of Pragmatism 1982 Minneapolis, University of Minesotta Press.
C. The Kind of Constructive Work that is being done in re-thinking the foundations of the Disciplines and Reforming Education by Feminist Post-modernists:

- Feminist theorists inspired by the work of Nancy Chodorow and Carol Gilligan in psychology are challenging our cultures over emphasis on autonomy, individual rights and justice and developing alternative accounts of ethics and epistemology which recognize the centrality of the correlative concepts of relatedness, responsibility and care.

- Feminist teachers and philosophers of education are engaging in counterhegemonic efforts which incorporate the insights of Freire, but go beyond them in their consciousness of gender differences.

- Team taught courses and interdisciplinary programs focussed on women's and minority studies combat the over-specialization and isolation of academic departments and help students integrate their often fragmented knowledge.

- Higher education is being transformed by major grant projects in America to integrate issues of race, class and gender into the mainstream curriculum.

- Feminist Post modernists believe it is not enough to reconstruct the modern tradition on the level of theory without a deeper reconstruction of education practice, which would avoid Lyotard's anarchism and address how to effectively achieve Rorty's "goal of initiating students into the wider community".

- Recent feminist theory strengthens the language of critiques of post-modernism by introducing the political issues of race, class and gender domination as central to the debate of epistemology.

- Feminist theory provides a "language of possibility" which forms the basis of a new radical pedagogy.

D. TRANSFORMATIVE EDUCATION - THE STATE OF THE ART 1990:

Schuster and Van Dyne (1984) in an informative article on curriculum change towards inclusiveness, provide a very clear rationale and description of the sequence of stages and strategies which are necessary to represent women and minorities, and thus a fuller range of human experience in the curriculum. Current curriculum change in Australia is, at best, generally only at the third stage which recognizes that women are still a disadvantaged population in education. However, the new integrated knowledge of Women's Studies "that has emerged over the past twenty two years" of curriculum development can now act as a counter balance to the perspective of the dominant group. (Foster 1989-28).
The crucial next stage where both men and women "examine the women's experience on their own terms outside existing paradigms and then challenging those paradigms" must begin to take place. "Only then can we proceed to any true transformation of the curriculum towards human inclusiveness" (Foster 1989:29).

The Ministry of Education in Western Australia (1989) has produced an explanatory guide "Inclusive Curriculum" to support school in their bid for equity in education. However, it fails to emphasise the need for dialogue between the twenty-two year old "pilot satellite curricula" of "girls" and "Aboriginals" and the traditional curriculum.

**RECOMMENDATIONS TOWARDS A NEW PHILOSOPHY OF EDUCATION:**

It is recommended that as faculty members of the School of Education, we:

- familiarize themselves with traditional conservatism, liberalism, Marxist, radical and socialist frameworks of feminism, their basic tenets, belief system and practices.
- examine Aristotelian thoughts on gender, which were "grossly misogynist" and trace the enormous influence these ideas have had upon Western scholarship and the "taken for granted assumptions of everyday life, both secular and religious".
- re-examine traditional educational theory and philosophy in the light of "cultural psychoanalysis".
- familiarize themselves with "women's world" perspectives, methods of thinking and modes of relating, which can help expand and deepen our sense of possibilities concerning epistemology, moral reasoning and ethical behaviour.
- consider the ways in which feminist perspectives can help to heal, reconstruct and balance the predominantly masculine structures in our institutions and in our scholarship.
- revisit the philosophy of John Dewey with its emphasis on Democracy and Education and the philosophy and practice of Paulo Friere, including feminist extensions.
- reconsider the philosophy of R.S. Peters and L. Kohlberg, with their limiting emphasis on abstract and rational thought, in the light of feminist philosophy, post-modernism, Giroux's vision of democratic education and Reid's Philosophy of Values and Aesthetism.
- re-evaluate female traditional choices as valid, prestigious knowledge, skilful and valued.
- reconsider education for excellence which encompasses a gender-inclusive perspective. (Sadgar and Sadgar 1989).
- consider a philosophy of education that encompasses the development of values, aestheticism and the creation of talent. (Collier 1959; Gray 1984; Reid 1986; )
o carefully consider the feminist philosophy of 'caring' and human
'dignity' and the practices we employ as educators particularly in
the teaching-learning situations we create and our evaluation
procedures (Noddings 1984).

o value the opportunity to engage in philosophical discourse taking
account of traditional philosophy (conservative), feminist
philosophy, post-modernism, radical democratic philosophy (Giroux),
and philosophies encapsulating the need for excellence the teaching
of values and alternative ways of knowing.

o read the Ministry of Education 'Inclusive Curriculum' guidelines
for implementing equity in the school.

o develop a new philosophy that underlies human inclusiveness within
a transformative curriculum.

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ADDENDUM:


APPENDIX A:

SUMMARY OF RECOMMENDATIONS

RECOMMENDATION 1

That the National Policy for the Education of Girls comprise the following elements:

(a) **Preamble:** to outline the broad social context within which the policy has been developed, relating to the role of schools in achieving equality between the sexes, and in improving the status of girls and women.

(b) **Framework for action:** comprising a statement of educational values and principles; a statement of broad objectives for improving schooling for girls; and an outline of priority areas within each broad objective.

(c) **Implementation strategies:** action undertaken by school and system authorities themselves, consistent with the policy framework.

(d) **Reporting and review procedures:** for the assessment of progress; and the periodic refinement and review of the policy overall.

RECOMMENDATION 2

That the following statement be included as the preamble to the National Policy for the Education of Girls.

Preamble:

In Australia and throughout the world, attention has focused on the status of women generally, on the need to improve the conditions of their lives, and on the benefits of a society where women and men participate as equals in all aspects of economic, social and political life. Schools have a role and responsibility in contributing to the achievement of equality between the sexes, and in improving the conditions of life for girls and women. All Australian schools should ensure that what is being taught and learned does justice to girls and women, taking account of their cultural, language and socio-economic diversity, and is equally valuable for girls and boys.

RECOMMENDATION 3

That the National Policy for the Education of Girls incorporate the following values and principles:

- Gender is not a determinant of capacity to learn
- Girls and boys should be valued equally in all aspects of schooling
equality of opportunity and outcomes in education for girls and boys may require differential provision, at least for a period of time.

strategies to improve the value of education for girls should be based on a recognition that action is required at both the primary and secondary levels.

strategies to improve the quality of education for girls should be based on an understanding that girls are not a homogeneous group.

priority in improving the quality of education for girls should be given to meeting the specific needs of those groups of girls most requiring support to benefit from schooling.

to improve schooling for Aboriginal and Torres Strait Islander girls, school authorities will need to take into account the unique culture of Aboriginal and Torres Strait Islander communities.

a high quality education for girls is a mainstream professional responsibility for all educators in all primary and secondary schools and school systems.

schooling for girls and boys should reflect the entitlement of all women, in their own right, to personal respect, economic security and participation in, and influence over, decisions which affect their lives.

school should educate girls and boys for satisfying, responsible and productive living, including work inside and outside the home.

schools should provide a curriculum which in content, language and methodology, meets the educational needs and entitlements of girls and which recognizes the contributions of women to society.

schools should provide a challenging learning environment which is socially and culturally supportive, and physically comfortable for girls and boys.

schools and systems should be organised and resources provided and allocated to ensure that the capacities of girls and boys are fully and equally realised.

the effective change and lasting improvements needed in schools will require awareness and understanding of the educational needs of girls on the part of students, parents, teachers and administrators, and institutional support for addressing these needs.

**RECOMMENDATION 4**

That the National Policy for the Education of Girls incorporate the following objectives and priority areas.

1. To raise awareness in schools and in the wider community of the educational needs of girls in contemporary society by:
(a) promoting awareness that girls and boys have an equal capacity for learning and equal rights in all aspects of schooling

(b) promoting awareness of the roles and status of women and of the specific educational needs of girls.

(c) improving the information base through fostering relevant research and statistical collections as a basis for refining or developing policies and practices relating to the educational needs of girls.

2. To ensure girls and boys have equal access to and participation in a school curriculum which contributes to full and equal participation in economic and social life through:

(a) Fundamental curriculum review and reform

   o to provide more comprehensive perspectives to broaden girls' understanding and options; to include study of sex and gender roles in society and their changing social relevance; and to overcome bias in content and related practices.

(b) Specific areas of curriculum reform

   o changes to gender-stereotyped areas of the curriculum
   o changes to particular curriculum areas to enhance girls' participation and achievement
   o development of new curriculum to include important areas of knowledge, of particular significance to girls, which are presently omitted.

3. To provide a supportive and challenging school environment for learning in which girls and boys are equally valued and their needs equitably addressed through:

(a) teaching and learning processes and classroom management
(b) school organisation and practice
(c) the social and cultural environment
(d) the physical environment
(e) an examination of values and attitudes relating to gender, sexuality and school achievement.

4. To ensure that school resource allocation policies and practices operate in ways which are consistent with principles of equity and relative need through:

(a) review of system and school-level resource allocation policies and practices by school and system authorities, with particular attention to equitable provisions for girls and boys, and the need to overcome the effects of past practices
provision of on-going general resources to address the education needs of girls arising from effects of attitudes and practices beyond the schools and past educational practices; and the differing needs of schools arising from socio-economic and cultural differences among the groups of girls they serve.

RECOMMENDATION 5

That Commonwealth, State and non-government school authorities develop strategies for improving the education of girls, within the framework of the National Policy for the Education of Girls, following consideration of the illustrative strategies in this Report.

RECOMMENDATION 6

Policy Review

That Commonwealth, State and non-government school authorities endorse and agree to participate in the reporting and review procedures outlined in Chapter 4 of this Report.

RECOMMENDATION 7