

THE SOCIAL CONSTRUCTION OF GENDER IN
THE PRACTICAL ARTS

by

LINDA EYRE

B.Hec., Mount Saint Vincent University, 1980
MA.Hed., Mount Saint Vincent University, 1985

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Department of Social and Educational Studies

The University of British Columbia
Vancouver, Canada

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ABSTRACT

This dissertation is a contribution to understanding the relationship between schooling and gender inequality. The study explores how gender as a social relation is organized and embedded in the daily experiences of classroom life and in the discourses of people who dwell there. The study deals with how classroom encounters contribute to the reproduction or transformation of gender categories and how students' and teachers' discursive practices build and support patriarchal structures. The study is grounded in critical education theory, feminist theory, and ethnographic research.

The specific site for the study is the knowledge area described as the Practical Arts, namely home economics and technical studies. The research is limited to a single Grade 8, coeducational, home economics and technical studies program in an inner-city, multi-ethnic, secondary school in western Canada. Evidence is based on participant observation of classrooms, for one school year, with one group of students as they proceed through a combined home economics and technical studies program. Evidence is also obtained through interviews with students and teachers.

The study illustrates how classroom practices support the patriarchal structures of division of labour, violence against women, and sexuality. The study shows how the students' and teachers' discursive practices produce girls

and women, and less powerful boys, in subordinate positions and as objects of regulation. As well, students' previous experiences in domestic and technical work, and classroom discourse, produce and support the division of labour. The study shows how the conditions of teachers' work, their authoritarian, product oriented approach, and their powerful, institutional discourses grounded in biological and psychological development and equality of educational opportunity, prevent them from challenging patriarchal structures.

Although the study shows how students and teachers are actively engaged in the production rather than the transformation of traditional gender relations, it also shows how patriarchy is incomplete: there were divisions within gender categories and there were many contradictions. The study shows how power relations are not static - they are constantly in process of negotiation, thereby opening possibilities for social change.

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CHAPTER 1

INTRODUCTION

School policies and initiatives dealing with gender inequality have burgeoned in recent years. Typically, schools focus on correcting gender bias in student-teacher interaction, eliminating sex stereotyping in school texts and resources, and balancing the ratio of female and male students in specific school subjects. Although these gains have not come about without concerted efforts by feminist teachers and parents (Weiner & Arnot, 1987), these solutions can still allow traditional gender relations of domination and subordination to flourish (Eichler, 1987; Martin, 1981; Sadker & Sadker, 1986; Spender, 1982; Tetreault, 1986). Mary O'Brien (1990) says solutions that deal with equality of opportunity while avoiding equality of condition are "fundamentally patriarchal in theory and in practice" (p. 12).

Absent from strategies that deal mainly with issues of access is an exploration of the relationship between classroom practices, the formation of gender, and patriarchal structures. Gender is a social, cultural, economic, and political construction of what it means to be a girl or a boy, a woman or a man. Gender is a social process that ascribes characteristics and behaviours to women and men according to their biological sex (Humm, 1990).

Gender is also a lived experience, a way of being. Robert Connell (1987) argues that femininity and masculinity are not fixed - there are variations within gender categories - but one kind or another becomes dominant. He argues that although these are not necessarily the most common patterns, they are kept in place through negotiation, coercion, control, and sometimes force. Valerie Walkerdine (1990) describes masculinity and femininity as "fictions linked to fantasies deeply embedded in the social world" - fictions that become powerful forces of regulation when "inscribed in...powerful practices like schooling" (p. xiii). Walkerdine and Connell argue that individuals do not simply passively reproduce gender stereotypes. Rather, individuals are actively involved in the production of gender relations.

While women and men are equally trapped in gender categories, the outcome for women is more serious. Women exist in a hierarchical relation of subordination and domination. Sylvia Walby (1990) writes:

Women have entered the public sphere but not on equal terms. They are present in the paid workplace, the state and public cultural institutions. But they are subordinated within them. Further, their subordination, in the domestic division of labour, sexual practices, and as receivers of male violence, continues. (p. 180)

Women are not passive victims of their subordination, but those who resist face overt and subtle obstacles (Faludi, 1991), indicating how gender as a characteristic of

everyday life is "organized by and sustains the institutional process" (Smith, 1988, p. 70). In education, not only do women have to "claim" an education (Rich, 1979), but they are held back by institutional barriers, such as the omission of women's experiences from the curriculum, a lack of affordable day-care, and expressions of violence towards women. The murder of thirteen women students and one woman clerical worker on December 6, 1989 at the University of Montreal's school of engineering by a gunman who declared war on feminists (Malette & Chalouh, 1991), epitomized for many women how gender is a matter of life and death.

This study examines how gender is socially constructed through schooling. The purpose is to discover how gender as a social relation is organized through student-student and student-teacher interaction in the social world of the classroom. The study of gender as a social process links classroom practices with broader political, economic, and social conditions. The study deals with how classroom encounters contribute to the reproduction or transformation of gender categories and ultimately of social inequality.

The specific site for this study is the knowledge area described as the Practical Arts, namely home economics and technical studies. The study explores how the everyday life of individuals in the home economics and technical studies classroom shapes and is shaped by social relations of

gender. The research is limited to a single Grade 8, coeducational, home economics and technical studies program in an inner-city, multi-ethnic, secondary school. Evidence is based on participant observation of classrooms, for one school year, with one group of students as they proceed through a combined home economics and technical studies program. Evidence is also obtained through interviews with students and teachers.

Home economics and technical studies are particularly interesting areas of study because they have a distinct history with regard to gender. In the early 20th century, home economics and technical studies were strictly sex differentiated. Whereas other school subjects, for utilitarian reasons only, became coeducational (Lasser, 1987), home economics and technical studies were excluded from the coeducational movement. This move reflected the ideology of gender, delegating women and men to their "natural," separate, private and public spheres (Prentice et al., 1988).

In the 1970s, in direct response to feminist concerns about gender inequality and the role of schooling in the sexual division of labour, home economics and technical studies were promoted as coeducational subjects. Now many schools require all junior high school students to take a coeducational home economics and technical studies program, organized on a rotational basis, for at least one school

year. Educators claim that requiring boys to take home economics promotes male participation in homemaking and parenting activities and ultimately shared understanding of the value and meaning of work in the private sphere (Thompson, 1984). By involving girls in technical studies, educators aim to develop girls' technological competence thereby enhancing girls' technological literacy and their attitudes toward the mathematical and physical sciences (Grant, 1983), and ultimately their participation in the public sphere. Little attention, however, has been paid to how goals of gender equity through coeducation are realized in coeducational home economics and technical studies classrooms.

This dissertation, then, is a contribution to understanding the relationship between schooling and gender inequality. This study explores how gender as a social relation is organized and embedded in the daily experiences of classroom life. It explores how students and teachers actively participate in the reproduction or transformation of gender relations. The study looks at how students and teachers shape and are shaped by patriarchal structures in the social world of the classroom. Also, the study recognizes diversity of experience. Thus it is sensitive,

for example, to how "race"¹ and class enter into the organization of gender.

Self-Reflexivity

This study is openly ideological because it deals with inequality for women. Patti Lather (1991) argues that self-reflexivity is essential when doing openly value-based inquiry. Self-reflexivity involves providing details about the researcher's personal investment in the study and in making explicit the assumptions that guide the research.

My understanding of the experiences of students and teachers in this study was influenced by my being a white, heterosexual, middle-class, middle-aged, able-bodied woman of privilege. My whiteness and my age are especially relevant to this study because the students were only 13 to 16 years old, and they represented a variety of ethnic and cultural groups. And, my privileged position as an academic researcher no doubt influenced my relationship with students and teachers. These dimensions of my being influenced the kinds of questions I asked and the kinds of things that I observed, and created blind-spots for other ways of being and seeing.

Also, I describe myself as a feminist. Although there is not a universal conception of feminism, there are certain

¹"Race" is used here as a sociological concept not as a biological one. Whilst I recognize the use of the term reifies race and may be viewed as racist, I am using "race" to indicate a concept around which oppression exists.

values and beliefs shared by most people who would describe themselves as "feminist" (Mitchell & Oakley, 1986). They are: a) the belief that women are an oppressed group - because people oppress people this is morally wrong and can and must be changed. (This does not mean that all women's experiences of oppression are the same.); b) the belief that the personal is political - through shared personal accounts of women's everyday lives this oppression can and must be named; and c) the need to develop a feminist consciousness through which women come to understand their oppression and become cognizant of the contradictions between the old and the new ways (Stanley & Wise, 1983).

There are, however, many feminist theories of women's oppression. Although Hester Eisenstein (1984) writes of the shifting and blurring of categories over time, the three most often identified are liberal, socialist, and radical feminisms (Cott, 1986; Descarries-Belanger & Roy, 1991; Donovan, 1985; Eisenstein, 1984; Tong, 1989). At the risk of being too simplistic, liberal feminism assumes women can be liberated through equality of access to education without changing overarching political structures. Socialist feminism argues that gender oppression intersects with capitalism and that change is possible through elimination of capitalistic structures in society. Radical feminism assumes that patriarchy is the source of women's oppression, entering the school through knowledge in the curriculum and

classroom practices. And in response to criticism that these feminisms represent white, middle-class women's interests, feminist theory is placing increasing emphasis on valuing the distinctiveness of women as a group while recognizing diversity among women. In particular, attention is given to differences of "race," socio-economic status, sexual orientation, and disability (Stasiulis, 1987).

Consequentially, there are different feminist strategies for dealing with gender inequality and schooling. Liberal feminism focuses on the problems of sex-role socialization, sex stereotyping, and sex discrimination; socialist feminism deals with how gender intersects with "race" and class and how schooling contributes to the division of labour; and radical feminism focuses on the experiences of schooling for girls and women, emphasizing a separate women's culture based on women's knowledge and experiences, and on diversity among women.

Like many feminist researchers my work reflects more than one type of feminist theory. My interest in gender inequality began with a concern about sex-role socialization and the division of labour. I saw coeducation in home economics and technical studies as a movement towards the sharing of work in the public and private spheres. Classroom observations and interviews with students and teachers suggest that my initial faith in the power of schooling was somewhat naive. The experiences of students

and teachers in classrooms required a more complex analysis, provided by a more radical feminist approach. At the same time, as an educator, I am still drawn to the possibilities of transformation of gender relations through schooling. As a woman, I may be trapped in what Valerie Walkerdine (1990) describes as a "concept of nurturance," "an idealist's dream," and an "impossible fiction" (p. 22).

In addition, I am not a disinterested party in relation to home economics and technical studies. My formal education in home economics began as a schoolgirl in the north-east of England. In my early school years I clearly remember doing needlework while the boys did something else - I am not sure what they did. In secondary school, my formal training for homemaking continued. Girls took courses in cookery and needlework, while boys took woodwork, metalwork, and technical drawing. As a student I never questioned the division. It was a part of my taken for granted experience that girls would need homemaking skills as wives and mothers. In the 1960s, I attended a teacher training college for Domestic Science. Here the emphasis was to train women to teach the knowledge and skills of homemaking to girls in schools. As a student-teacher I did not question why this was a predominantly female field. My world was that of women. My purpose was to educate young women for homemaking. In my classroom we never discussed the absence of men.

As a home economics teacher in Canada in the early 1970s, I began to be influenced by feminism and the women's movement. Courses in women's studies helped me to look at my world differently, to name my own oppression, and to link it to the experiences of others. Reading feminist theory alerted me to the feminist critique of home economics. I saw myself and my profession implicated in the sexual division of labour and women's oppression. Consequently, I became actively involved locally and provincially in the promotion of coeducational home economics and, indirectly, technical studies. And, as a doctoral student I looked forward to exploring the outcome of this work.

This study, then, is not a disinterested piece of work, but it does conform to the rigours of openly ideological ethnographic research. Although what is written is my interpretation of what I heard and what I saw, the strength of the study lies in the careful accumulation and re-presentation of evidence, and in attention to reciprocity - the negotiation of meaning with participants in the study. As an ethnographic study, it does not intend to generalize, but it may "ring true" with other people in other settings.

Organization

I have organized the dissertation into eight chapters. The second chapter reviews the literature that brought me to this study. I review literature in women and education, critical education theory and feminist critique of that

work, and gender and home economics and technical studies. I build a framework for the study by showing how the work has evolved during the past two decades, highlighting what has been accomplished and what remains to be done.

Chapter 3 outlines the methodology and the method of the study. In particular, I focus on issues of validity in openly ideological ethnographic research. Also, I describe my approach to classroom observation and interviews, and highlight some of my experiences pursuing research organized around the concept of reciprocity.

The fourth, fifth, and sixth chapters provide extensive evidence about how gender is constructed in the home economics and technical studies classrooms. Chapter 4 deals with knowledge in the curriculum, the students' sense of competence in each area and their responses to the program. I show how requiring girls and boys to participate in domestic and technical work, and the teachers' product oriented approach, did not change the students' minds about the division of labour. The students' responses, however, were not straightforward: there were inconsistencies and contradictions as students struggled to reassert their positions in domestic and technical work.

Chapter 5 focuses on the social relations of the classroom. I look at how students produce traditional notions of femininity and masculinity through best friendships and group formation, domination and harassment,

heterosexual relationships and prohibitions against homosexuality, and through expressions of popular culture in and through the body. But I point out divisions within gender categories and show how students' practices were riddled with contradictions.

Chapter 6 presents the teachers' reflections on their practice. The teachers' responses show how understandings of gender equity have shaped their work and how their practice is constrained by the conditions of their work. Although I show how the teachers interpret life in their classrooms through an ideology of liberalism and individualism based in Western culture, I also show how their reflections open possibilities for pedagogical change.

In Chapter 7 I try to make sense of what has happened by explaining classroom practices in terms of large scale patriarchal structures. Specifically, I show how the patriarchal structures of division of labour, violence against women, and sexuality were actively built and contested through students' and teachers' classroom practices, and through discourse.

The final chapter draws conclusions from what has been said and offers some suggestions for future directions. I argue that although students and teachers actively produced traditional gender relations and supported patriarchal structures, there were inconsistencies and contradictions, thereby opening possibilities for social change. I call for

a re-thinking of gender equity policies that deal only with issues of access.

CHAPTER 2

REVIEW OF LITERATURE

This chapter presents an overview of the literature related to the social construction of gender and schooling. It includes an overview of theoretical work which attempts to describe and explain how schooling contributes to gender inequality. The chapter situates the study in social reproduction and cultural production theories in education and in the feminist critique of this work.

Gender Equity and Curriculum Literature

A body of feminist scholarship has focused attention on gender equity issues and curriculum. It has dealt not only with curriculum guides and resources, but also with school organization, school knowledge, classroom interaction, and classroom pedagogy. This work seeks to make visible gender inequities in schooling and offers practical solutions to deal with specific problems. The following overview illustrates how this work has evolved during the past two decades.

In the early 1970s, feminist researchers challenged liberal assumptions about equality of educational opportunity by showing how schooling disadvantaged girls and women. They argued that sex stereotyping and sex discrimination in schooling restricted women's access to higher education and job opportunities. They argued for

equal (same) treatment of female and male students (Byrne, 1978).

In the 1980s, a proliferation of studies focused on sexism in education. Dale Spender's and Elizabeth Sarah's (1980) Learning to Lose brought together feminist critiques of coeducation for girls and women, and provided impetus for future work. The under-representation of female students in school subjects related to science and technology received special attention (Kelly, 1981; Whyte, 1986). As well, there was concern that male students were under-represented in languages, social sciences, business education, and home economics (Geen, 1989; Whyld, 1983; Whyte, 1980).

Many studies uncovered sex-role stereotyping in curriculum materials. Particular attention was given to resources used in elementary schools (Best, 1983; Lobban, 1987; Northam, 1987; Smail, 1984; Stones, 1983). Departments of Education offered anti-sexism workshops for teachers (Cornbleet & Saunders, 1982), and handbooks devoted to the topic of sex equity were produced (Klein, 1985). The solution lay in a gender neutral approach to school texts and resources.

Other researchers focused attention on the lives of students and teachers in classrooms. Classroom interaction research showed how teachers treated girls and boys differentially and had different expectations of them (Clarricoates, 1980; Delamont, 1983; Irving, 1985; La

France, 1991; Leaman, 1984; Sadker & Sadker, 1986). Studies showed that boys dominated classroom interaction, monopolized resources, and were more confident in their abilities than girls. Strategies aimed at improving teachers' classroom practices were suggested.

Although this early work has been valuable in initiating discussion about, and documenting instances of, sex discriminatory practices in schooling, it does have limitations. Emphasis on sex roles locates gender inequality in expectations about behaviour rather than in the patriarchal structures in society (Carrigan et al., 1987). It equates "the same" with equal, assimilating everyone to male expectations. Valerie Walkerdine (1990) writes:

Equal opportunities and much work on sex role stereotyping deny difference in a most punitive and harmful way....A denial of the reality of difference means that the girl must bear the burden of her anxiety herself. It is literally not spoken. (p. 46)

Also, a gender neutral approach to texts and resources masks gender bias and allows discrimination to continue in more subtle ways (Eichler, 1987; Houston, 1987). In addition, emphasis on teaching practices implies that gender inequities can be eliminated by "quick-fix" solutions such as improving teachers' questioning techniques. Kathleen Weiler (1988) sums up the concerns about such approaches to gender inequality in schooling:

Implicit in this view is the concept that sexism exists within the realm of ideas, and if those ideas are

changed, then social relationships will also change. Such a view ignores the constraints of the material world and the various forms of power and privilege that work together in a complex and mutually reinforced process to make up social reality as we know it. It also ignores the complexity of consciousness and the existence of ideology and culture. (p. 28)

While one stream of feminist thought saw the reduction of differences between the sexes as a solution to gender equity, another viewed difference as a potential source of power for women. From this perspective women's lives, interests, and experiences needed to be revalued and feminine virtues viewed as strengths (Gilligan, 1982; Martin, 1985; Noddings, 1984; Rich, 1985; Spender, 1982).

The woman centered perspective sought different solutions to gender equity and schooling. Scholars addressed concerns about a masculine bias in school knowledge (Rosser, 1980; Spender, 1980; Strong-Boag, 1990; Willis, 1989) and questioned the value of coeducational environments for women (Howe, 1984; Lasser, 1987; Mahony, 1985; Shaw, 1980). The argument, briefly, was that coeducation meant giving girls and women an education designed for men. Adrienne Rich (1985), a lesbian feminist:

If there is any misleading concept, it is that of 'coeducation': that because women and men are sitting in the same classrooms, hearing the same lectures, reading the same books, performing the same laboratory experiments, they are receiving an equal education. They are not, first because the content of education itself validates men as it invalidates women. Its very message is that men have been the shapers and thinkers of the world, and that this is only natural. The bias of higher education, including the so-called sciences, is white, and male, racist and sexist, and this bias is expressed in subtle and blatant ways. (p. 24)

Similarly, Jane Roland Martin (1981), an educational philosopher, argued that schools are permeated with masculine values of competition, power, and control and prepare students only for the public world. She said schooling should be informed with feminine virtues of care, concern, connectedness, and nurturance, and should also prepare students for the private world of home and family. In describing her conception of the educated person, Martin said:

We need a conception of [the educated person] which does not fall into the trap of assigning males and females to the different processes of society, yet does not make the mistake of ignoring one kind of process altogether. We all participate in both kinds of processes and both are important to all of us. Whether we adopt one or many ideals, a conception of the educated person that is tied only to one kind of process will be incomplete. (p. 107)

Martin stated that feminine and masculine dimensions must become an integral part of the education of all students and across all subjects in the curriculum. She said that girls and boys would be advantaged by understanding both perspectives.

Also, Martin (1981) questioned the notion that girls and boys should be treated "the same." She said that gender equity is more likely to be achieved if teachers are sensitive to differences between girls and boys, differences based on their past, gendered experiences. She said that teachers should provide different treatments to reflect the interests of the disadvantaged group:

When sex or gender is thought to make no difference, women's lives, experiences, activities are overlooked and an ideal is formulated in terms of men and the roles for which they have traditionally been considered suited....Sex or gender has to be taken into account if the ideal of the educated person is not to be biased....What is needed is a gender-sensitive ideal, one which takes sex or gender into account when it makes a difference and ignores it when it does not. Such an ideal would truly be gender-just. (p. 109)

Mary Belenky, Blythe Clinchy, Nancy Goldberger, and Jill Tarule (1986) related gender sensitivity specifically to theory about how women learn. These scholars suggested that women may come to know in ways that are distinctly different from those of men. They said that schooling should be sensitive to women's ways of knowing: ways of knowing grounded in life experience rather than abstractions. They proposed a pedagogy more conducive to women's ways of knowing: "banking" and "doubting" models of education would be replaced with more collaborative, cooperative, and caring learning environments.

Another branch of feminist scholarship has challenged the implicit essentialism of a woman-centered perspective. Writings of poor women, older women, black women, Native women, refugee women, women with disabilities, and lesbian feminists have drawn attention to the complexities of women's experiences. Feminist scholars sensitive to differences among women state that gender inequality is tied to other oppressions, such as those stemming from racism (Davis, 1983; hooks, 1984) and heterosexism (Rich, 1986),

and that "the systems of oppression are interlocking and mutually determining" (De Lauretis, 1990, p. 133).

In education, the literature is beginning to describe the experiences of students and teachers who face oppressions such as those based on the intersection of gender and socio-economic status (Luttrell, 1989); gender and "race" (Amos & Palmer, 1981; Bryan, Dadzie, & Scafe, 1987; Evans, 1992; Mirza, 1992; Pelleschi, 1988; Riley, 1986; Scott-Jones & Clarke, 1986; Sleeter & Grant, 1985); and gender and sexual orientation (Doe, 1991; Harbeck, 1992; Khayatt 1990; Rofes, 1989; Trenchard, 1992; Trenchard & Warren, 1987). In writing about diversity among women, Jane Gaskell and Arlene McLaren (1991) provide a challenge for educators in the 1990s:

It means valuing difference based on structured divisions in society, placing difference rather than commonality at the center of feminism and rethinking the whole based on those differences. It means building alliances between feminism and other democratic struggles. In education it means transforming the curriculum and pedagogy to ensure that all people give voice to their experience, to analyze and understand it, and to connect it to the experience of others. (p. 10)

Critical Educational Literature

While some feminist researchers in education deal with gender equity issues at the level of the curriculum, others attempt to explain the relation between power in the society and schooling practices. The question from this perspective is not so much what exists, but rather how does it happen?

How do the relations between people in the context of schools legitimize women's subordination? The following overview shows how this approach builds on social reproduction and cultural production theories, and has moved into different stages over time.

Social Reproduction Theory

In the late 1960s, the assumption that education was a socially neutral enterprise was challenged by those who became known as "the new sociologists of education" or "critical educational theorists." Influenced by the French philosopher, Louis Althusser (1971), early critical educational theorists examined how class structures are maintained through schooling. Althusser argued that schools promote knowledge, skills, behaviour, and attitudes necessary to provide the labour power, and relations of production, required by the capitalist system. This work became known as "social reproduction" theory.

In North America, Samuel Bowles and Herbert Gintis (1976) developed a similar explanation of social reproduction. They argued that there was a direct correspondence between the social relations of the school and those of the workplace. Schools, they argued, foster specific personality traits in students: some schools promote traits that are required for individuals to be submissive and willing workers; other schools produce managers and the elite. Also, Bowles and Gintis identified

characteristics of the workplace that were reflected in the organization of work in schools, such as workers' lack of control over their work, a system of competition, rewards and threats of failure, and the fragmentation of the work itself.

Michael Apple (1982, 1987) presented a similar argument in relation to teachers' work. Apple (1982) argued that characteristics of the workplace such as the deskilling and reskilling of workers, the separation of mental and manual labour, the separation of the conception of a task from its execution, enter the school through corporate publishing. Apple (1987) described the effect on teachers as the "proletarianization" and "deskilling" of teachers. He spoke of an "alliance" between industry and the New Right. Education, according to Apple, was reduced to "economic utility" (Apple, 1988, 1989).

Scholars of "cultural reproduction" examined the way that class structure is legitimated and maintained through school knowledge and language (Bernstein, 1979; Bourdieu & Passeron, 1977; Young, 1971). Influenced by Peter Berger and Thomas Luckmann (1967) who argued that all knowledge is socially constructed, the new sociologists of education questioned assumptions about what counts as educational knowledge. They asked "Whose knowledge gets into schools" and "Whose interests does such knowledge represent?" The

argument was that if school knowledge was socially constructed, then it could also be reconstructed.

Pierre Bourdieu and Jean-Claude Passeron (1977) argued that class structure is reproduced through students' access to "cultural capital." Bourdieu and Passeron maintained that working-class students are disadvantaged in schools because school knowledge reflects bourgeois culture. Basil Bernstein (1979) examined the process of transmission of knowledge in schools. Bernstein added to the debate by arguing that educational knowledge not only represents bourgeois interests, but also is transmitted via middle-class language that is "foreign" to working-class students.

While social and cultural reproduction theory raised political and ethical debate about schooling, it ignored the question of schools as possible sites of contestation and resistance. These early studies began to be viewed as too simplistic, overly deterministic, and as an obstacle to social reform.

Social Reproduction Theory and Gender

Feminist scholars drew attention to the lack of attention to girls' and women's experiences by social reproduction theorists. Madeleine MacDonald (1980) and Ann Marie Wolpe (1978) described the work of Althusser and Bowles and Gintis as "gender blind" because they assumed that the experience of schooling was the same for girls and

boys. Miriam David (1978) argued that Bowles' and Gintis' work was also contradictory because they said that schooling prepared students for the labour force, yet they argued that the home rather than the school contributed to the sexual division of labour in the economy. As Kathleen Weiler (1988) points out, "Bowles and Gintis assume throughout their work that the youths they were describing are male and the social relations learned refer exclusively to the class structure and waged work" (p. 9). Mary Fuller (1980) stated that not only did the social reproduction theorists generalize males to females, but they also assumed adolescents to be "racially undifferentiated" (p. 52).

Feminist scholars set about inserting the concerns of gender and "race" into a class based social reproduction framework (Deem, 1980; Delamont, 1980; Fuller, 1980; Wolpe, 1978, 1981). Rosemary Deem's (1980) edited collection Schooling for Women's Work, illuminated how schooling reinforces the sexual division of labour. A contribution by Madeleine MacDonald (1980) showed how working-class female students are directed into courses related to domesticity, a diluted academic curriculum, and oriented toward a future domestic role rather than waged labour, while middle-class female students are directed into traditional female dominated professions such as nursing, education, and social work.

Feminist scholars influenced by cultural reproduction theory examined how school knowledge gets constructed, who benefits, and whose interests it represents. For example, Linda Valli (1988) examined how a cooperative education program in a high school business education department shaped not only students' knowledge about the nature of office work, but also their "being" as office workers. Through observation and interviews with women students, Valli explored the explicit and implicit messages which the program conveyed. She found that learning opportunities for women were severely restricted and resembled routine, dehumanizing, subordinate office practice. On-the-job experiences either provided a similar view, or conveyed messages which reinforced students' sense of inadequacy. Either way students learned a sense of dissatisfaction which, according to Valli, contributes to women "self distancing" themselves from the market economy and their ultimate dependence.

While showing how schooling supports capitalism and patriarchy by directing women students into unpaid domestic work and a reserve army of labour, feminist social reproduction theory also had limitations. Like social reproduction theory, this work failed to acknowledge the resistance of students and teachers in schools. The overall message was deterministic and functionalist.

Cultural Production Theory

Scholars, influenced by Antonio Gramsci (1971), began to question the narrow economic approach of social and cultural reproduction theories. A direct link between what is taught in school and what students believe was questioned by those who argued that students are not passive recipients of school knowledge. Rather, students resist some of the messages of schooling and actively produce their own new meanings (Anyon, 1984; Apple, 1981; Giroux, 1983; Willis, 1977; Young & Whitty, 1977). From this position, schools were seen as potential sites of social reproduction and social transformation.

The concept of hegemony, as explained by Gramsci, is central to cultural production theory. According to Weiler (1988), Gramsci's explanation of hegemony in Selections from the Prison Notebooks (1971) has been read in two ways. The first explains hegemony as the way in which dominant classes project their own way of viewing the world onto subordinate classes so that the latter accept this as "common sense," "given," and "natural." Weiler argues that a more careful reading of Gramsci's work reveals his view that individuals are able to contest hegemonic control. The power of individuals to resist subordination means that the dominant groups have to constantly reassert their position. Important here is not only the notion of "control" and

"consent," but also "resistance" and "contestation." Weiler (1988) writes:

In [Gramsci's] formulation, hegemony is never complete, always in the process of being reimposed and always capable of being resisted by historical subjects. In this sense it becomes a theoretical tool which can be employed in detailed textual analysis and ethnographic imagination....his unshakeable belief in the power of critique and political activism allow us to begin to see individuals as both shaped by history and shapers of history. (p. 17)

Following Gramsci, Henry Giroux (1981) views schools as sites "characterized by an ongoing struggle between hegemonic and counter-hegemonic forces" (p. 15). He views hegemonic control as "riddled with contradictions" and argues that "radical educators must seize the positive moment that exists amidst the cracks and disjunction" (p. 31). In recent years, Giroux (1986, 1987, 1991) has further developed his view that teachers and students, and classroom discourse are potential counter-hegemonic forces.

Production theory is beginning to explore how schooling supports oppressive structures such as racism, colonialism, and heterosexism, and how these categories conflict and intersect. Michael Apple and Lois Weis (1983) edited a collection of essays which showed how action in the spheres of economics, culture, and politics interact and influence each other, and how the dynamics of gender, "race," and class operate in each sphere. Apple and Weis described this as a "parallelist" position. More recently, Cameron McCarthy and Michael Apple (1988) pushed the "parallelist"

position further. They argued that the model is too general, too abstract and indicates that gender, "race," and class oppression inevitably reproduce each other. The authors describe research which shows how these dynamics sometimes contradict, rather than reproduce each other. They call for research that will shed light on the intersection of gender, "race," and class, on how these dynamics operate in cultural, economic, and political spheres, and how they reproduce and contradict each other.

Cultural Production Theory and Gender

Early ethnographic studies situated in cultural production theory and related to gender issues focused on the anti-school culture of working-class, adolescent males (Corrigan, 1979; Hebdige, 1979; Willis, 1977). In Learning to Labour (1977), Paul Willis showed how the working-class "lads" rejected the school's ideology, but in so doing produced a culture that confirmed their working-class position and their masculinity. While challenging school authority, the "lads" anti-school culture celebrated working-class masculinity and they willingly accepted working-class jobs. Willis (1981) argued that the "lads" did not passively accept the middle-class curriculum of the school, as social reproduction theory would suggest. Rather, collectively, the "lads" rebelled against the messages of the school and produced their own meanings, thereby opening possibilities for social change.

Feminist scholars challenged the adequacy of Willis' (1977) theorizing of the "lads" resistance (Arnot, 1982; Llewellyn, 1980; McRobbie, 1980). Angela McRobbie (1980) questioned Willis' valorizing of the "lads" resistance to dominant social relations when they clearly conformed to traditional notions of masculinity: to the "lads," a woman was either "the girlfriend," "the missus," or an "easy lay." She said that Willis failed to develop the connection between patriarchy and the "lads" personal relationships with women. Madeleine Arnot (1982) challenged the masculinist practice of generalizing studies of male youth to females. She argued that girls' and women's resistance might be different from that of boys and men, because women are oppressed by patriarchy and capitalism.

Influenced by Willis' (1977) concepts of resistance and human agency in relation to working-class boys, feminist researchers turned their attention to girls (Griffin, 1985; Lees, 1986; McRobbie, 1978, 1981, 1991). Angela McRobbie (1978) showed how white, working-class girls challenged school authority and middle-class notions of appropriate femininity through overt displays of sexuality. McRobbie said:

One way in which girls combat the class-based and oppressive features of the school is to assert their "femaleness," to introduce into the classroom their physical maturity in such a way as to force the teachers to take notice. A class instinct then finds expression at the level of jettisoning the official ideology for girls in the school (neatness, diligence,

compliance, femininity, passivity, etc) and replacing it with a more feminine, even sexual one. (p. 104)

McRobbie (1981) showed how girls formed "bedroom subcultures" and were engrossed in the ideology of romance through popular music (Frith & McRobbie, 1978), and teenage "romance" magazines (McRobbie, 1981, 1991). She suggested that the girls' response was a form of resistance to their inevitable working-class futures as wives and mothers. Like Willis, McRobbie argued that while the girls' sub-cultures were sites of resistance to capitalism and patriarchy, the girls' actions had the effect of confirming their class positions and reinforcing their oppression under patriarchy.

Other studies suggest that girls' responses to school and family are not expressions of resistance, but rather they are pragmatic solutions to everyday life (Connell, Ashendon, Kessler, & Dowsett, 1982; Fuller, 1980; Gaskell, 1985; Lees, 1986). Sue Lees (1986) found that working-class and middle-class girls in Britain had a negative picture of married life, but they still wanted to marry. Lees suggests that the girls were resigned to marriage because it was a way out of either being alone or being labelled a "slag." For working-class girls, marriage was also a means to financial security. Rather than looking upon girls' responses as resistance, Lees says that girls' responses should be viewed as conformity to the sexist climate of the school. She writes:

The fact that much of the pressure towards marriage and domesticity is to be found in the social life of the school rather than in the formal structure of the curriculum should not lead to the conclusion that girls end up in marriage and domestic life because they have constructed a counter school culture....It is not the girls who construct sexism as a counter-culture. It is there in the social life of the school, in the presence of and the interaction with boys and in the behaviour of the teachers. (p. 120)

A pragmatic response by girls was noted by Jane Gaskell (1985) in an investigation of course enrolment. Gaskell showed how girls chose traditional futures not as a form of resistance to school authority, but because of the social limitations imposed upon them. Gaskell writes: "Changing their minds would have meant changing the world they experienced, not simply convincing them of a new set of ideals around equality of opportunity and the desirability of a different world" (p. 58).

Similarly, Mary Fuller (1980) found that girls of West Indian parentage in a British secondary school responded pragmatically to school. The girls did not conform to the expectations of a "good" student: they challenged the teachers' authority and were disruptive in the classroom. At the same time, the girls had high aspirations and achieved well in examinations. Fuller argues that the girls were aware of racial discrimination and believed that their life chances would be improved with academic qualifications. The girls believed that credentials would lead to a career and ultimately would improve their chances of independence from men.

Also, Magda Lewis (1989) questions whether the concept of resistance can be applied universally to women and men. Using autobiography, Lewis explored the dilemmas faced by a feminist teacher. She asks: "What can we learn from women's resistance to feminist politics and how might we use this knowledge to form the basis of our teaching?" (p. 21). Lewis states that "resistance to the emancipatory potential of a liberating politics is an indication of the extent of our subordination" (p. 21), and therefore feminist teachers must be sensitive to the context of women's lives. She says that current scholarship on transformation and resistance fails to take account of women's experiences "as simultaneously a site of desire and threat" (p. 3). Lewis argues that radical pedagogy excludes women if it does not attend to "the threat to women's survival and livelihood that a critique of patriarchy...poses" (p. 5).

Leslie Roman (1988) critiques feminist production theory for its "masculinist tendencies" (p. 14). Roman argues that feminist researchers such as McRobbie and Griffin reacted to Willis' neglect of the private sphere by romanticizing the role of family life and domesticity in the lives of young women. She states that McRobbie's analysis of popular culture does not take into account the concept of gender "as both construct and critique" (p. 17). That is, a woman's response not only constructs her femininity, but it is also mediated by her subjectivity as a woman. As well,

Roman argues that feminist production theory does not make visible the internal power divisions among and between women and men. Roman's critique has implication for future work. She says that it is no longer:

adequate to study young women and men who are proximate intimates as though they are unrelated cohorts when the object of analysis is their gender relations. Nor is it adequate to assume in advance that the family is the crucial site wherein women experience gender subordination when the object is to understand how women's subordination varies across the sites of waged work, the family and schools. (p. 18)

Some scholars have directed their attention to the connection between gender, language, and power in classrooms. Attention has been given to sexual harassment of girls by boys (Jones, 1986; Mahony, 1988a, 1988b), and to the experiences of woman teachers in school classrooms (Acker, 1988; De Lyon & Migniuolo, 1989; Lampert, 1985; Miller, 1986; Weiler, 1988). Similar work has been carried out in university settings (Flemming et al., 1991; Kramarae & Treichler, 1990; Lewis, 1990; Williams, 1990). This work focuses on girls' and women's experiences and illustrates how schooling both supports and challenges patriarchal structures.

Other scholars have attended to the gendered experiences of boys in schools. Researchers have examined the experiences of boys in elementary school (Askew, 1988), and secondary school (Corrigan, 1991), and they have examined how the curriculum supports traditional notions of masculinity (Frank, 1990; Kidd, 1987; Whatley, 1988). These

authors expose the relationship between discourse in schools and the construction of male identities and masculinities.

Other studies have attended to internal divisions in power relations (Kessler, Ashendon, Connell, & Dowsett, 1985; Walkerdine, 1981, 1990; Walden & Walkerdine, 1986). In her work in a British primary (elementary) school, Valerie Walkerdine (1981) showed how girls and boys and the teacher negotiated power in the classroom; how they at once seized and relinquished power. Walkerdine argues that individuals do not represent fixed positions of power. She says power is "produced as a constantly shifting relation" (p. 23). According to Walkerdine, power is not determined by the fact that individuals are boys, girls, or teachers; power is constantly negotiated between them. Walkerdine described the power held by girls as having a "double edge." It reinforced traditional notions of femininity and tied them to domesticity and economic dependence:

the contradictions, the struggles for power, the shifting relations of power, all testify to the necessity for an understanding of subjectivities, not a unique subjectivity. These contradictions also point to the necessity to rethink our strategies for action within education....It no longer seems enough to believe that we are in a process of simply oppressing children. Neither can we be comforted by the thought that 'progressive education' will free children to explore their own experience, without understanding precisely how that experience is understood and how it produces the children as subjects. (p. 24)

Sandra Kessler, Dean Ashendon, Bob Connell, and Gary Dowsett (1985) state that most studies of gender and schooling focus too simplistically on predetermined

categories of "female" and "male." They argue that attention should be paid to variation within categories and to how particular kinds of femininity and masculinity are constructed as cultural ideals and how other kinds are suppressed.

The work of Kessler et al. (1985) involved interviews with 100 students in Australian working-class and upper middle-class secondary schools, their parents and teachers. The research showed how the schools were actively engaged in constructing gender. Through school organization, the academic curriculum, informal peer groups, and relations between students and teachers, each school constructed a gender regime, defined as:

the pattern of practices that constructs various kinds of masculinity and femininity among staff and students, orders them in terms of prestige and power, and constructs a sexual division of labour within the institution. The gender regime is a state of play rather than a permanent condition. It can be changed, deliberately or otherwise, but it is no less powerful in its effects on the pupils for that. It confronts them with a social fact which they have to come to terms with somehow. (p. 42)

The authors argue that although there is diversity within masculinity and femininity within schools, one kind or another becomes dominant:

These are the ones that come to be seen as the pattern of masculinity or femininity in general and are often assumed to be the natural characteristics of each sex. Other kinds of behaviour and character are defined as deviant or inferior and attract derision, hostility, and sometimes violence. (p. 44)

Kessler et al. (1985) and Connell (1987) refer to the dominant patterns as "hegemonic masculinity" and "emphasized femininity." Connell (1987) writes:

Hegemonic masculinity is always constructed in relation to various subordinated masculinities as well as in relation to women. The interplay between different forms of masculinity is an important part of how a patriarchal social order works.

At the level of mass social relations...forms of femininity are defined clearly....It is the global subordination of women to men that provides an essential basis for differentiation. [Emphasized femininity] is defined around compliance with this subordination and is oriented to accommodating the interests and desires of men. (p. 183)

Connell says that contemporary hegemonic masculinity is also heterosexual. He says that "contempt for homosexuality and homosexual men...is part of the ideological package of hegemonic masculinity" (p. 186).

Connell's (1987) work joins other critiques of production theory by responding to internal divisions within categories. He says that individuals do not simply resist or reproduce oppressive structures, but are constantly constituting their own culture. Studies of the role of schooling in maintaining gender inequality, therefore, should explore how individuals build as well as respond to oppressive social structures.

For several reasons I have found the work of Connell (1987), Kessler et al. (1985), and Walkerdine (1981, 1989, 1990), useful in analyzing gender relations in the study reported here, and for raising questions about appropriate

pedagogic responses. Because power was negotiated among and between girls and boys in the study, it was not appropriate to speak of differences between girls and boys. Rather, as Walkerdine (1981) says there were "a multiplicity of subjectivities" (p. 23). In addition, because there was division within gender categories, what became of interest was how a particular kind of femininity and a particular kind of masculinity were supported and others suppressed. The particular kinds of femininity and masculinity fitted with Kessler's and her colleagues', and Connell's notion of "emphasized femininity" and "hegemonic masculinity." Their work also provided a way of analyzing the heterosexism and homophobia evident in the classrooms studied.

Gender and Home Economics and Technical Studies

While there has been feminist critique of home economics and technology per se, there are few studies which deal specifically with gender and home economics and technical studies education. Because home economics, historically, has addressed the role of women only in homemaking and parenting, and because this subject has been taught to a predominantly female group, home economics, as a profession, has been charged with supporting the sexual division of labour and ultimately the oppression of women (Delphy, 1984; Ehrenreich & English, 1979; Eyre, 1985; Rowbotham, 1973; Stamp, 1977; Wynn, 1977). In addition, home economics has been criticized by scholars within the

field for reliance on technical rationality (Brown, 1984), reflection of middle-class interests (Brown, 1984), androcentrism (Peterat, 1989), racism (Williams, 1988), and heterosexism (Eyre, 1990).

Literature on gender and home economics education has dealt mainly with issues of access (Dobry, 1977; Geen, 1989; Kelly & Morgan, 1979; Lawson, 1977; Sheppard, 1983), sex role stereotyping and sex discrimination in school texts and resources (Benzley, 1990; Dobry, 1986; Hayibor, 1990; Weis, 1974; Williams & Nickols, 1981; Wynn, 1983), with curriculum content (Attar, 1990), and with masculinist bias in school knowledge (Benzley, 1990; Eyre, 1989, 1990).

Feminist critique of technology has challenged the masculinist bias in technological knowledge, the exclusion of women from technological processes, and the impact of technology on women's lives (Cherry, McIntyre & Jaggernathsingh, 1991; Franklin, 1990; Kramarae, 1988; Rothschild, 1983). This work is part of a rich literature on the feminist critique of science (Keller, 1985).

Literature on gender and technology education has dealt mainly with issues of access (Bruce, 1986; Catton, 1986) and with masculine assumptions inherent in technology education (Rothschild, 1983, 1988, 1989).

Classroom interaction research in Britain has exposed sexist practices in Craft Design and Technology (Cawthorne, 1988; Grant, 1983; Whyte, 1984), a program which resembles a

combined home economics and technical studies curriculum. These studies have shown how male students dominate classroom discussion and teacher attention, monopolize resources, and are more confident in their abilities than girls. Analysis of teacher-student interaction has shown that teachers treat boys and girls in a stereotypical manner and have different expectations for them.

Although this work has been helpful in influencing policy at the classroom level it suffers from the same limitations as the "Gender Equity" literature mentioned previously. Emphasis on sex roles draws attention away from larger social forces that support and maintain women's subordination. More recent approaches suggest attention to the notion of power and relation will more adequately provide an understanding of the development and maintenance of traditional gender categories (Connell, 1987; Walkerdine, 1990).

The approach used in classroom interaction studies of home economics and technical studies has involved observations of large samples using quantifiable coding schemes. Pre-established categories do not allow for the existence of many and conflicting patterns in classroom interaction and little attempt is made to contextualize the interaction or to obtain the perspectives of students and teachers (Dart & Clarke, 1988; Hammersley, 1986). Also, more emphasis has been placed on teacher-student than

student-student interaction and on the number of interactions rather than on the gendered discourse of the classroom. Classroom interaction research in home economics and technical studies has also ignored divisions within gender categories and has considered gender separate from other issues such as those of "race," class, and heterosexism.

This study grows from suggestions in the literature that have been more often called for than accomplished. First, it explores how home economics and technical studies classrooms are sites of the larger social processes of gender relations. Second, it views students and teachers as actively involved in the production of gender. It looks at how they are shaped by and shape traditional gender categories and how they reproduce and/or transform gender relations. Third, while focusing primarily on the social organization of gender, the study tries to be sensitive to individual differences, particularly those based on "race" and social class.

CHAPTER 3

DOING ETHNOGRAPHIC RESEARCH

Writing ethnography is not about capturing the real. Instead, ethnography, if it is to be critical, must begin in identifying its own textual strategies, in pointing out the gaps between stories, the structure, and the retellings, and in representing the constructions of cultural knowledge as overdetermined by relations of power, subjective investments, and what cannot said. (Britzman, 1990, p. 12)

This chapter deals with the methodology and method of the study. Sandra Harding (1987) describes "methodology" as "a theory and analysis of how research does or should proceed" (p. 3), whereas "method" deals with "techniques for gathering evidence" (p. 2). She argues that discussions of method and methodology should be separated otherwise there is a lack of clarity about what is distinctive about, and what must be done to advance, feminist social inquiry. The chapter, therefore, attends to each separately beginning with a discussion of methodology. The chapter concludes with a description of my experiences in the field.

Methodology

The ultimate goal of traditional social science research is to advance knowledge of people and to further a specific discipline. The purpose of feminist research, however, is directed at changing the social reality of women. These different purposes are reflected in the clash between two epistemological positions: a) scientific knowledge is supposed to be value neutral and protected from

the social values of the researcher, and b) feminist research is founded on political principles.

Patti Lather (1991), however, argues that in this postpositivist era it is no longer a question of whether data are biased. She says the question to ask is: "Whose interests are served by the bias?" (p. 14). Lather calls for "self-reflexivity" which she defines as explication of "how researcher values permeate inquiry" (p. 2). At the same time, she alerts praxis-oriented researchers to the dangers of "conceptual overdeterminism" (p. 14), and to the "distorting effect of personal bias upon the logic of evidence" (p. 66). Lather says that it is important to explore "how to do 'good' openly value-based inquiry" (p. 14).

This study is "openly value-based" (Lather, 1991, p. 14) because it deals with inequality for women and brings gender up-front and center. This does not mean merely that women are included in the research, although the disproportionate focus on men by ethnographic researchers has been well documented (Daniels, 1975; Imber & Tuana, 1988; Joy, 1984; Lofland, 1975; Tomm, 1989; Trebilcot, 1988). Rather, the experiences of gender from the perspectives of all participants, including the researcher, raise political questions which challenge traditional methodological and epistemological assumptions (Currie, 1988).

Following Lather, this section of the chapter looks at three methodological issues central to this study: the role of theory in emancipatory oriented research; the relationship between the researcher and the researched; and questions surrounding validity.

Theory

Tension exists within the field research tradition regarding the place of theory and the use of theoretical models in data analysis. Some argue that theory should be used to orient research and to make sense of the data (Woods, 1986). Others argue that theory driven studies contradict the spirit of ethnographic research (Ball, 1984). Martyn Hammersley and Paul Atkinson (1983), building on the work of Barney Glaser and Anselm Strauss (1967), emphasize that theory comes from the experiences of the setting and is reflexive; it is grounded in the setting.

Feminist researchers have added to the debate. Liz Stanley and Sue Wise (1983), and others, argue that sexist research develops knowledge from grand theory and objectifies experiences in order to discover knowledge and "truth." According to Maria Mies (1983) this approach has "reproduced the structural separation of theory and practice" (p. 119). Margrit Eichler (in Stanley & Wise, 1983) writes: "Surely feminism should be concerned with making experience the basis of theory and not with making a fetish out of grand theory which by its very nature can't be

applied to specific situations" (p. 100). Also, Dawn Currie (1988) writes: "Conceptual categories emerge out of the data rather than existing as an a priori....This results in the development of new concepts as we conduct our research and, eventually, new theoretical discourse" (p. 19).

However, Lather (1986) argues that a priori theory, as opposed to grounded theory, is at the heart of value-based inquiry. She says that tensions arise among researchers who are caught between wanting to build theory on lived experience and explain that experience in terms of social theory. Lather offers a useful solution to the impasse. She says "not only must theory illuminate the lived experience of progressive social groups; it must also be illuminated by their struggles" (p. 262). She calls for "a systemized reflexivity which reveals how a priori theory has been changed by the logic of the data," and a "conscious context of theory building" while guarding against "theoretical imposition" (p. 271). In this work, I do come at my study with a set of theoretical assumptions, but attempt as Lather suggests to question my assumptions during the course of the research.

Relationship between the Researcher and the Research/ed

In the field research tradition, there are also differences of opinion about the role of the researcher in relation to the researched and about how open the researcher should be about her or his personal experiences and

influence in the research enterprise (Hammersley & Atkinson, 1983; Mishler, 1986).

Feminist researchers have attended to the relationship between the researcher and the researched. Many feminist researchers argue that there is no place for hierarchies in emancipatory oriented research (e.g. Harding, 1987). Some suggest that the following techniques are less oppressive: life histories and action research (Imber & Tuana, 1988; Krall, 1988); participatory research (Maguire, 1987); experiential research (Reinharz, 1983); interviews that resemble conversations (Oakley, 1981); and more views from below rather than above (Mies, 1983).

Lather (1986) argues for reciprocity, which she describes as "the mutual negotiation of meaning and power" (p. 263). She says that earlier attention to the relationship between researcher and researched was to obtain better data. She argues that "we must go beyond the concern for better data to a concern for research as praxis...to use our research to help participants understand and change their situations...for empowering the researched" (p. 263).

Lather (1986) suggests that the following approaches encourage reciprocity in research:

Interviews conducted in an interactive, dialogic manner that require self disclosure on the part of the researcher....Sequential interviews of both individuals and small groups to facilitate collaboration and a deeper probing of research issues....Negotiating meaning [by]...recycling description, emerging analysis and conclusions to at least a subsample of respondents. (p. 266)

Lather also raises the issue of false consciousness.

She says:

We need to discover the necessary conditions that free people to engage in ideology critique....There, in the nexus of that dialectic, lies the opportunity to create reciprocal, dialogic research designs which not only lead to self-reflection but also provide a forum in which to test the usefulness, the resonance, of conceptual and theoretical formulations. (p. 266)

In addition, Lather argues for reciprocity for theory building. She writes:

The point is to provide an environment that invites participants' critical reactions to our accounts of their worlds....As such, dialogic research designs allow us both to begin to grasp the necessary conditions for people to engage in ideology critique and transformative social action and to distinguish between...'enabling' versus 'blinding' biases on the part of the researcher. (p. 268)

Whereas this study was guided by Lather's suggested approaches to research, later in this chapter I describe difficulties I experienced in carrying out research designed around Lather's concept of reciprocity. This has drawn me to the work of those who critique critical approaches to research and pedagogy.

Valerie Walkerdine (1990) argues that the researcher/participant relationship is not an issue of intrusiveness, but one of power. She says that power relations cannot be resolved by what she describes as "patronizing attempts" at "reducing power differentials" (p. 195). She describes observation as "surveillant voyeurism, a 'will to tell the truth'...which contains a set of desperate desires - for power, control, for vicarious

joining-in...as well as a desperate fear of the Other being observed" (p. 174). She says that "we should look at the desire for forms of mastery that are present in our own subjectification as cultural analysts before rushing to 'save' 'the masses'" (p. 174). Walkerdine writes:

However disguised, the observer's account is a regulative reading which pathologizes the participants' actions. The knowledge it produces will inevitably differ from the meanings ascribed to them by the participants - meanings they produce as they live out the practices in which they are formed. But the struggle between them is not simply about the 'values' attached to meanings. Nor is it about validating people's interpretations. It is a struggle about power with a clear material effectivity. One might therefore ask how far it is possible for the observer to 'speak' for the observed. (p. 195)

Similarly, Elizabeth Ellsworth (1989) provides a critique of discourses on critical pedagogy which, I suggest, can be applied to empowerment oriented research. Ellsworth says that assumptions about "empowerment" and "dialogue" are "repressive myths that perpetuate relations of dominance" (p. 298). She argues that critical pedagogy is often dependent upon "analytic critical judgement" (p. 304). This approach, she argues, perpetuates "myths of the ideal rational person" (p. 304), and serves to exclude and oppress others. Ellsworth describes oppressive teaching strategies meant to "give students the analytic skills to make them as free, rational, and objective as teachers supposedly are" and "to bring the student 'up' to the teacher's level of understanding" (p. 306). Ellsworth says "no teacher is free of...learned and internalized

oppressions" (p. 308). She argues that such attempts at critical pedagogy leave the hierarchical relationship between teacher and student intact. Like Walkerdine, Ellsworth says "Such a relation becomes voyeuristic when the voice of the pedagogue herself goes unexamined" (p. 312).

Establishing Trustworthiness

In any research study the researcher must be concerned about the accuracy of research findings. Ethnographic and feminist researchers tend to view research "validity" as an emerging construct undergoing debate (Goetz, 1989). This study was guided by the views of validity described by Lincoln and Guba (1985), Lather (1986), Hawkesworth (1989), and Donmeyer (1985).

Yvonna Lincoln and Egon Guba (1985) use terms which they argue are more appropriate for naturalistic forms of inquiry. They use "credibility," "transferability," "dependability," and "confirmability" in place of "internal validity," "external validity," "reliability," and "objectivity," respectively. To establish credibility they suggest: prolonged engagement in the setting, persistent observation, triangulation, peer debriefing, negative case analysis, referential adequacy, and member checks. For transferability they suggest: thick description and purposive sampling. For dependability: previously established credibility, triangulation, and inquiry audit.

For confirmability: inquiry audit, triangulation, and reflexive journals.

Lather (1991) deals specifically with "how to do 'good' openly value-based inquiry" (p. 14). She argues that praxis-oriented researchers need to search for "workable ways of establishing the trustworthiness of data in critical inquiry" (p. 52). Building on the work of Lincoln and Guba, Lather (1986) offers a reconceptualization of validity which, she argues, is particularly appropriate for emancipatory oriented research. Lather's notion of triangulation includes not only the standard measures of multiple data sources and methods, but also theoretical schemes. She calls for construct validity which, through "a systemized reflexivity" encompasses a "conscious context of theory building" whilst guarding against "theoretical imposition" (p. 271). Lather adds to Lincoln's and Guba's "member checks." She suggests that face validity, taking the results back to the participants for checking followed by possible refining of the data, "should be a necessary but not a sufficient approach to establishing data credibility" (p. 272). In addition, Lather describes catalytic validity, as the degree to which the research has an emancipatory and transformative effect upon the participants. Lather writes: "Catalytic validity represents the degree to which the research process reorients, focuses, and energizes

participants toward knowing reality in order to transform it" (p. 272).

Mary Hawkesworth (1989) proposes a shift away from male/female issues of objectivity advanced by feminist empiricism and feminist standpoint theories, and away from the relativist position of postmodernism, toward discussion of the validity of claims. Hawkesworth states "Knowing presupposes involvement in a social process replete with rules of compliance, norms of assessment, and standards of excellence that are humanly created" (p. 548). From this perspective, the feminist research community asks different questions and interprets research differently than traditional approaches. This does not mean the acceptance of a relativist position, but rather standards of rationality are set by the community of scholars. Hawkesworth writes: "A critical feminist epistemology...must defend the adoption of a minimalist standard of rationality that requires that belief be apportioned evidence and that no assertion be immune from critical assessment" (p. 556). Hawkesworth says that claims are not derived from "some privileged standpoint of the feminist knower nor from the putative merits of particular institutions but from the strength of rational argument, from the ability to demonstrate point by point the deficiencies of alternative explanations" (p. 557).

Robert Donmoyer's (1985) work, based on Toulmin's notion of purpose in science, is also useful in evaluating research. Similar to Hawkesworth, Donmoyer argues that each discipline has its own purpose. He writes: "Differing purposes will inevitably result in different criteria for appraising the relative adequacy of conflicting conceptual schemes or languages" (p. 18). This does not mean a relativist position. Donmoyer's framework of first, second, and third order mistakes can be used as a model to evaluate a research study. First order mistakes arise when there is insufficient evidence to support propositions, second order mistakes occur when the language used "to frame propositions is not appropriate or adequate for particular purposes," and third order mistakes "relate to the inadequacies of the purposes themselves" (p. 19).

Thus, according to Donmoyer, to judge the trustworthiness of research, attention must be given to gathering and appraising evidence while avoiding personal bias. To judge theoretical coherence, the theoretical framework must be adequate for the purposes of the research. The researcher must be clear about the political purposes of the research and how this influences the kinds of questions asked, the selection of research methods, and what is or is not revealed by a particular study. Overarching both are questions about the "desirability of the purposes the research serves" (p. 19). To do so involves discussion

about political questions and open dialogue about the stand taken by the researcher as a political actor. Thus, as Toulmin states, "Questions of justice have taken place in the forum of scientific judgement alongside questions of truth" (in Donmoyer, 1985, p. 19).

Method

This study is situated in the field research tradition of ethnography. The ethnographic researcher studies the culture of a setting to provide knowledge about human activity. Although a unified conception of ethnography does not exist, the ethnographic approach generally assumes that knowledge is socially constructed (Berger & Luckman, 1966) and is shared in a reflexive way by members of a setting. The ethnographer claims that knowledge can be established by spending time with, observing, and talking with people in their natural settings. Paramount to much ethnographic research is the notion that it is dialectic, interactive, and adaptive (Hymes, 1982).

The diversity of ethnographic texts is indicative of the influence of hermeneutic philosophy, phenomenology, and feminist theory (Clifford & Marcus, 1986). Traditionally, ethnography was characterized by accounts which provided an interpretation of a setting and sought to represent cultures. More recently, recognition of the limits of representation, and the reflexive nature of the field, has resulted in accounts which assume, at best, that accounts

are only partial truths and are necessarily incomplete (Clifford, 1986). Also, earlier emphasis on visual observation only, the hierarchical separation of observer and "subject," and distancing of author and reader, has been replaced by more attention to the spoken word, more collaborative and cooperative processes, and emphasis on the writing of texts which engage the reader in the experience itself rather than an interpretation of it. The evolution of the field is evident in fieldwork accounts which are self-reflexive, subjective, dialogical, and polyphonic (Tyler, 1986).

The Setting

The setting for this study was a mandatory, Grade 8, coeducational, home economics/technical studies program in an inner-city, multi-ethnic, secondary school in Vancouver, British Columbia. The study is based on participant observation and interviews with a classroom group of 24 Grade 8 students (10 girls and 14 boys) and six teachers, during a school year. Students represented a variety of ethnic and cultural groups. The majority of students were of Chinese and Vietnamese origins, with the remainder having various backgrounds, including First Nations, Indo-Canadian and English Canadian. All of the teachers were "white" and from so-called majority backgrounds. All of the home economics teachers were women, and all of the technical studies teachers were men.

The school was recommended to me by curriculum consultants for home economics and technical studies as a school that had made a strong commitment to a coeducational practical arts program. Teachers in this school had been active proponents of coeducation and the school was one of the first in the school district to implement a junior high, coeducational practical arts initiative. The program had been in place for five years, unlike many other schools whose programs were still in the planning stages.

The school offered Grade 8, coeducational home economics/technical studies organized on a rotational basis among six teachers. The students spent approximately 18 one-hour classroom periods in each of the following subject areas: food and nutrition, clothing and textiles, family management, woodwork, graphics and drafting, and electricity. Home economics and technical studies classrooms were not streamed: students from the feeder elementary schools were randomly placed in each classroom. I followed one group of students through the rotational program.

The school provided a case of a coeducational home economics/technical studies setting. Many schools across Canada are moving toward coeducational home economics/technical studies programs organized on a similar rotational basis.

Knowledge about gender relations in the coeducational home economics/technical studies program was primarily established through observation of classrooms and interviews with students and teachers involved in the program. Observation and interviews proceeded concurrently, but in this chapter they are described separately.

Observation

Observation involves spending time with participants in their "natural" setting, doing what is often described as "participant observation" (Spradley, 1980). The ethnographic researcher gathers information from the setting itself and from the interaction of the people in the setting. Some differentiate between researchers who claim to assume a "fly on the wall" stance and those who are actively involved with the participants, and various stages in between (Spradley, 1980). I tend to favour Elvi Whittaker (personal communication, September 27, 1988) who argues that an observer's intrusion renders her or him a "participant" in a setting.

The ethnographer has to make decisions about how to record observations. Some may use video or audio recordings; most use field notes. Those who use field notes have to decide whether to write the notes during or after a period of observation in the field, and how extensive the notes will be. Field notes range from key words which serve

to remind the researcher about events to extensive accounts which include interpretation and analysis (Spradley, 1980).

In this study, I wrote descriptive field notes while students and teachers talked and worked. In what became my own shorthand, I recorded what students and teachers did and what they said to each other. I typed up my notes at the end of each day in the field. These notes were descriptive only. I recorded my thoughts about analysis and interpretation, and things that cannot be said, in a separate field diary.

Questions which guided my observation of the students were: What are the students' reactions to learning experiences in the HE/TS classroom? Are there differences among students in their participation in HE/TS? How does classroom talk, interaction, and behaviour vary among students? Do students help or "do" for each other? How are students grouped? Does behaviour and interaction of students vary among groups? Do students work together or individually? Are there differences in how individual students, or groups of students, interact with the teacher in HE/TS? Do students participate actively in the teaching/learning situation?

Questions which guided my observation of the teachers were: How does the teacher interact with the students? Are there differences in the way the teacher interacts with individual students or with groups of students? Does the

teacher demonstrate sensitivity to the different experiences of students, for example, differences based on gender, ethnicity, and socio-economic status? How does the teacher deal with different ability levels of students? Do the teacher's selection of learning experiences, and her or his classroom interaction, promote and exemplify the establishment of egalitarian relationships? What am I able to learn about the teacher's understanding of equity issues from classroom verbal and nonverbal interaction?

In addition, how do answers to questions regarding observation of students and teachers vary between units of study within and between HE/TS classrooms and among female and male students and teachers? What might be reasons for difference? How do other dimensions such as those based on race and social class enter into the relations of gender?

Interviews

The ethnographic interview is usually open-ended and semi-structured. Its purpose is to gain an understanding of a setting from the perspective of those in it. Ethnographic researchers frequently talk about interviews that resemble conversations (Hammersley & Atkinson, 1983; Mishler, 1986). Feminist, Ann Oakley (1981) stresses the importance of conversation as a two-way sharing of information. She says researchers must be willing to share their own lives with participants. Oakley argues that two-way conversations are

essential for the fostering of non-hierarchical relationships between the researcher and the participants.

In this study, I used three interview formats with teachers and students: formal individual interviews, formal group interviews, and informal talks. I audio-taped the formal interviews and transcribed them myself.

Teacher interviews.

I carried out two formal interviews with each of the six teachers. I interviewed each teacher at the beginning and end of her or his allotted time with the students. The interviews took place at a pre-arranged time, usually at the beginning or the end of a school day, or during lunch hour. I interviewed one teacher in her home.

Although ethnographic research is reflexive, thereby allowing the data collection process to be shaped following analysis of the data during the course of fieldwork, my previous experience as a home economics teacher and as an ethnographic researcher in a home economics classroom suggested foreshadowing questions. For example, interviews with teachers sought answers to questions such as: What is the teacher's understanding of the purpose of HE and TS, and of a link, if any, between the two? What is the teacher's understanding of the purpose of a combined HE/TS program? What is the teacher's response to coeducational classrooms? What does the teacher find most rewarding, frustrating, exciting, or disappointing about HE/TS? Has the HE/TS

program changed or influenced the teacher's work, approach, content, evaluation procedures? Has the teacher experienced any difficulty in implementing the program? Would the teacher like to see HE/TS continue beyond Grade 8? Why or why not? What link do teachers see between HE/TS and students' present and future lives? What is the teacher's understanding of gender issues and schooling? What are the teacher's views regarding gender differences in students' participation and interaction in HE/TS classrooms? What differences, if any, has the teacher found between teaching girls and boys, and students of different ethnic groups? To what extent and how does the teacher accommodate any differences? What does the teacher know about her or his students?

The final individual interview with each teacher centered on her or his responses to the observation transcripts. A few days before the interview I gave each teacher the typed transcripts of my observations of his or her classroom. I wanted to find out whether my observations "rang true" or "clicked" with the teachers' understandings of my descriptions of life in their classrooms.

I held two group sessions with the teachers. The first session was held at the beginning of the school year when I described the project to the teachers. The second session was held a year after the actual research was completed. At that time I presented my analysis to the teachers and

recorded their comments. The teachers' responses fed back into my analysis and provided the necessary corrective that Lather (1986) talks about.

Student interviews.

I interviewed 21 students. All of the interviews were held during the school lunch hour. Interviews with students sought answers to questions such as: What does HE/TS mean to students? What is it like to be a student in a coeducational HE/TS classroom? Which units do students enjoy, find relevant, want to learn more about, and why? What do students not like or find irrelevant about HE/TS, and why? Is there anything in the HE/TS curriculum that conflicts with students' values and experiences outside of school? What difficulties have students experienced in HE/TS? Is there anything about HE/TS that makes them angry, happy, excited, irritated, comfortable, uncomfortable, and why? What are students' previous experiences in food preparation, clothing, wood, electricity etc.? What link, if any, do students see between HE and TS and their future lives? What do students believe their future experiences will be? Do students intend to elect HE and/or TS next year? Why or why not? Do students believe all school subjects are open to them? Why, why not? What are students' perceptions of their parents' responses to them taking HE/TS? How do students view this response?

In addition, interviews with students and teachers asked participants to account for actions that I observed in the classroom. An account, according to Marvin Scott and Stanford Lyman (1968) is:

A statement made by a social actor to explain unanticipated or untoward behavior - whether that behavior is his [sic] own or that of others, and whether the proximate cause for the statement arises from the actor himself [sic] or from someone else.
(p. 46)

Understanding the intentionality of an individual's action can lead to a better understanding of how gender is socially constructed and why maintenance or transformation of gender relations might occur.

Informal interviews.

Throughout the study I talked to the teachers and students. These talks were informal in that they occurred impromptu. I did not take notes, but usually summarized the conversation in writing at the first opportunity. I frequently talked to students as we waited to go into a classroom or while they were working on their projects. I talked to teachers after class or in the staff cafeteria.

In the Field

Entering

My relationship with participants in the study began in 1987 when I was working with teachers in graduate education courses. One teacher, who eventually became a participant in the study, was as interested as I was in promoting gender

equity in home economics through coeducational programs. When I needed a school to carry out an assignment on this topic for a research methods course, the teacher invited me to observe her classroom.

Although at that time my thinking about gender equity was limited to that of gender roles, and I conducted that research in a different school, I look upon that experience as preparation for the present study. Over the next few years I gradually became familiar with gender equity policies in the district where I lived and worked, and developed my thinking about gender equity and schooling.

When I was ready to begin my doctoral research I submitted a proposal to the local school board, requesting permission to contact schools in the district. The focus of my research was to be gender relations in coeducational home economics classrooms. The Board responded by saying that they would prefer that the research involve home economics and technical studies classrooms, and in particular, the junior high coeducational home economics and technical studies program.

At first I was reluctant to expand my study. However, after speaking with the district consultants for home economics and technical studies and with my advisor, I felt excited about the possibilities of including a traditionally male dominated, as well as a traditionally female dominated, school subject in the research. Both consultants were

enthusiastic and said they felt that my work would make a valuable contribution to program development. They suggested that I contact teachers in a school that had been involved with the coeducational program for some time. I liked the idea of contributing to the local education community and I felt pleased that, as far as the Board was concerned, I was accepted as a researcher.

I contacted the school principal and all of the teachers by letter in July, 1989. I explained the purpose of the research and described the kind of research I would be doing. I said that I would contact each of them, individually, at the beginning of September to find out if they were willing to pursue this project with me.

In September, the first teacher whom I contacted told me that the teachers had talked about my request and all agreed to have me observe their classrooms. I spoke with the other teachers and arranged to meet them as a group so that I could explain the study in more detail. I also telephoned the school to arrange a meeting with the principal.

My meeting with the principal was short, but productive. He showed an interest in my work, but assured me that it would be up to the teachers to decide whether the research should proceed. He gave me background information about the school and the students. He introduced me to the other two male vice-principals. The principal did voice his

concern about research studies that never materialize, and asked that I give a copy of the dissertation to the school. Before leaving, the principal introduced me to the office staff. I felt welcome.

The following day, I met with the teachers at 8:30 a.m. I knew that the teachers' time was precious and that they no doubt had things to do before class. I kept my presentation short, leaving time for questions. I emphasized that I knew the pressures of teaching and admitted that I was not sure that I would want someone in my classroom on a daily basis. The teachers' comments suggested to me that they were proud of their program and that they were pleased someone was taking an interest in their work. One teacher said that he hoped the study would show why few girls were taking technical studies in senior high school. The teachers were surprised and disappointed that, for ethical reasons, their names could not be in the dissertation. We were mutually concerned about which group of students would be the most suitable group for the study. One teacher suggested that I spend a few minutes in each classroom that morning to see for myself which group of students would be the most appropriate.

My visit to each classroom was short, but it gave me a chance to reassure the teachers that their participation was voluntary and they could change their minds at any time. Each teacher introduced me to her or his group of students.

I sensed anxiety from one teacher who said "You aren't coming to me first are you?" I replied "Not if you don't want me to." I decided to begin with the Family Management section, partly because here was the teacher I already knew, but also because this section provided the best opportunity for me to interact with the students and to get to know their names. I telephoned the teacher that evening to tell her of my decision. I wrote in my field diary: "[name of teacher] seemed a little anxious that I should begin with her group, but she told me to come tomorrow rather than next week as I had suggested" (Field Diary, September 11, 1989).

I was, of course, elated that the teachers had responded so positively to my proposal. At the same time, I was concerned that they may have felt pressured to participate. I knew the importance of developing a sincere, non-hierarchical, reciprocal relationship with the teachers.

I felt very apprehensive about my first day in the classroom with the students. I thought carefully about what to wear - jeans, sneakers, and a sweatshirt was my uniform for months to come. Although I was not required to obtain official consent from the students to be in their classroom, afterwards I regretted not having carried out some kind of permission procedure with them. I knew that developing a friendly ongoing relationship with the students as well as the teachers was of ultimate importance.

The teacher introduced me as a student from the university. I told the students I was there to find out about what happened in the home economics/technical studies program. I told them that I would be taking notes and that I would like to talk to them individually about the program.

Gaining consent for individual interviews with students was more difficult than I had anticipated. Following Board requirements, I developed a consent letter to be sent to parents. When I showed the letter to the principal he suggested a major edit. After three attempts, he approved the letter. The final draft looked little like my original: it was more clear, but more compelling. I asked about having the letter translated for non-English speaking parents, but the principal said that this was not usually done and that students were used to interpreting letters for parents.

I explained the purpose of the letter to the students. One boy asked why the students couldn't just sign the letter themselves. It took many reminders from the teacher before most of the letters were returned. I felt very uncomfortable about the procedure surrounding the letters. I knew that the students and their parents were being asked to participate in something they might not fully understand. I wondered if parents in a more affluent area of the city would have been so obliging. I understood how research,

despite its emancipatory intent, can lead to the oppression of others.

Watching and Listening

I had intended to participate in the classroom activities as a student. I thought that if I made projects along with the students, this would bring me closer to individual students and small groups. I also felt that my active participation would make the teachers feel more comfortable with my presence. I soon realized, however, that I could not learn how to operate a table saw and observe the gender dynamics of the classroom at the same time. I decided to sit with the students and watch, listen, and talk to them as they worked.

My observations were selective. The classrooms were large and students usually sat in small groups at separate tables. Students also moved around the room as they worked. Frequently, the noise of equipment and machinery drowned out conversation. Teachers moved from one group of students to another. Consequently, I was usually able to take in only what was happening immediately around me, and this too was a process of selection from many events. To compensate, I varied my position in the classroom, sitting with different groups of students daily. Although on most occasions the students were cooperative and friendly, there were times when they clearly wanted to be left alone. One entry in my field diary read: "I sat next to Poonam, Lily, and Melanie.

They immediately moved to another table leaving me on my own" (Field Diary, October 24, 1989).

My note taking was not straightforward, nor without trauma. At the beginning of the year, students occasionally asked me what I was writing. I responded with vague comments such as "I'm writing about things that are happening in the classroom." A few asked to see my notes. I tried to treat this as a joke saying that they would never be able to make out my writing. The few who peered over my shoulder confirmed my response. Although the students' questions about my notetaking diminished as the year progressed, they were clearly aware of my actions. An entry in my field diary read: "The bus driver asked if anyone had a pen he could borrow. Vinh called out, 'Ms Eyre, she has one, she's always taking notes'" (Field Diary, November 17, 1989).

While I tried to treat students' inquiries in a lighthearted way, the students had every right to challenge my intrusion into their private worlds. I felt awkward about writing about students and teachers in their presence, but I knew that I would not be able to remember details, otherwise. It seemed to me that it was the details of conversations and events that were important to this study.

While observing I was often placed in the position of having to resist assuming a teacher role. Occasionally, students came to me for help with their work. Sometimes,

the teachers talked to me as if I was another teacher. I avoided becoming involved in teacher disagreements with or about students. This problem was most likely to occur when there was a substitute teacher. She or he looked to me for information about what the students should or should not be doing in the classroom. Also, occasionally I had to fight to restrain my own impulses:

I sat on the bus with the students while the teacher and the driver completed paper work before we could leave for the trip. The students were very noisy. The boys at the back of the bus were entertained by Bao and Jay who were calling Gemma 'horny.' She retaliated, telling them to 'Get lost.' Stuart and Danny had their heads out of the windows, shouting and whistling to students outside. Chau and Thanh were jumping up and down trying to see if their heads could touch the roof of the bus. Vinh was holding David's head down on the seat in a wrestling manoeuvre. The girls egged the boys on, shouting to the back of the bus, and calling the boys 'stupid.' Jill looked completely disgusted but ended up name calling across to Vinh and David. I was tempted to settle them down - but resisted!
(Field Diary, November 17, 1989)

Talking

While my intention was to have each interview resemble a conversation, this was more difficult than I had anticipated. During formal taped interviews, the teachers kept pushing me back into a more hierarchical interview style. For example, after what I thought was a wonderful "conversation" a teacher asked, "How am I doing?" Although I acknowledge that stepping in and out of a conversation is possible, such a question is not usually asked in a conversation.

Informal talks with the teachers did resemble conversations. Conversations in the staff cafeteria often involved feminist issues. A teacher might talk about something she or he had seen or heard on television or at a conference. Although I did not initiate these conversations the study seemed to me to provide a reason for talking about gender issues and education.

Talked to [name of teacher] in the staff cafeteria. He said that having a 'girls only' school golf team was discriminatory. We talked about that for a while....He also said that he had bought a 'non-sexist' dictionary, but thought it was sexist. He is going to bring it in to show me. (Field Diary, February 22, 1990)

[Name of teacher] phoned to tell me her application for the sexism grant had been accepted. She said she was going to a dinner sponsored by the Vancouver Society for Immigrant and Visible Minority Women. She said she had attended the Sadker and Sadker presentation and so had [names of two of the male teachers in the study]. Is this the transformative effect that Patti Lather talks about? (Field Diary, December 4, 1989)

In addition, I talked with teachers before and after class. My conversations with the men teachers were usually brief and mostly pertained to what had transpired in the classroom. On one occasion, my conversation with a man teacher was interrupted by another man teacher who made a comment about spending time "talking with the ladies." The woman teachers often invited me to stay and have coffee or lunch with them. Our conversations involved a variety of topics and usually took place in the staff cafeteria or in the home economics room:

After class [name of teacher] was upset because she felt the students had behaved badly. She said she

didn't know what to do with the boys who dominated the lesson. She said she didn't know what to do to get the girls to participate....We talked about this until [name of teacher] arrived to put something in the storeroom. She sat down with us and asked about how the study was going. The conversation switched to our finances and RRSPs and then to our own experiences as student teachers....The bell rang and [name of teacher]'s students began to arrive for her afternoon classes. I felt guilty about taking her noon hour instead of leaving her in peace to gather energy for the afternoon. (Field Diary, September 29, 1989)

My access to conversations with the female and the male teachers was clearly influenced by our gendered experiences.

The formal interviews with students were more difficult than I had anticipated. While only two students did not return their permission slips, many did not show at the interview time. Understandably, students did not want to spend their lunch hours with me! I considered taking class-time for the interviews, but decided against this approach because it would have meant students falling behind with their work. I persevered and learned to be thankful for fifteen to twenty minutes of a student's time.

I had arranged to meet with Rita today. When she arrived she said that she was behind with her French homework and had to go to see the [French] teacher. She said she was sorry, but she had been sick at the weekend. In some ways I was relieved - I was a bit nervous about meeting her and didn't mind having a little more time to think about my questions. (Field Diary, October 11, 1989)

My interview with Rita was great. We sat outside on the grass. The tension was minimal, she seemed relaxed and friendly. She laughed and made me feel at ease! (Field Diary, October 18, 1989)

My attempt to make the student interviews more like conversations was not always successful. Sometimes I was forced into a question and answer format. I wondered if this was their way of ending the interview as quickly as possible. I discussed my difficulties with a professor experienced in research interviewing. He suggested that I use only one opening question such as "Tell me what it is like to be..." and then let the student develop the conversation from there.

I tried [name of professor]'s one question approach, but it didn't work with Jennifer. She could keep silent longer than I could! She often said 'I don't know' and 'What else do you want?' She said she could only stay for fifteen minutes. (Field Diary, November 1, 1989)

The most successful formal interview was with two female students. After two "no-shows," the girls asked me if they could be interviewed together. The girls talked to each other and to me. I asked few questions. They laughed, talked and shared their experiences. This interview was an ethnographer's dream come true.

I talked informally with the students while they were doing their work, and when they waited outside of the classroom. I enjoyed these chats and got to know the students individually.

When I was waiting outside of the classroom Jay came running up to me. He called me 'Ms Eyre' and asked if it was still alright to hand in his permission slip (for the trip to the port). He told me about the tape he was carrying in his 'Walkman.' Tina came along and she too chatted. She showed me a picture of a young

male star....She seemed surprised that I didn't know who he was! (Field Diary, November 17, 1989)

Throughout the observations and interviews no matter how hard I tried to overcome the distance between myself and the participants, clearly I was not one of them. There were times when I was apprehensive of them and they of me. But my age, my white, heterosexual, middle-class academic position of privilege, and my own gendered experience no doubt influenced the kinds of things I was alert to in the classroom and how I was able to engage in conversation with the participants. I feel that my experience was similar to that of Walkerdine (1990) who said, after she watched families watching videos: "[The participants] clearly indicated on many occasions that they experienced me as surveillant Other. Their responses to my presence cannot be understood without taking this into consideration" (p. 195).

Making Sense

While I added to my growing mountain of observation and interview protocols, I began the process of analysis. While transcribing my observations and interviews I wrote additional notes in my field diary which served to direct my thoughts the following day. As Renata Tesch (1990) says, data collection and analysis become integrated and inform each other.

To help manage the enormous amount of material I was collecting I decided to write a summary of my observations

as each section came to a close. Although the summaries of my observations of each individual classroom are not in the dissertation, they helped me to organize my thoughts and alerted me to what to look for in subsequent sections. In other words, the summaries helped me to focus and select from the enormous amount of information that is available to a researcher in a one-hour classroom session.

By the end of the school year I had amassed hundreds of pages of typed observations and interview transcripts. Knowing where and how to start the next stage of analysis seemed a monumental task. My advisor suggested that I begin by writing vignettes of classroom life that spoke to the issue of gender. I read all of my observation protocols and selected major episodes or events that spoke to how gender is socially constructed in the classroom. I wrote the vignettes as if writing passages for a novel. In all, I wrote about thirty episodes. This was an extremely helpful exercise. Writing the vignettes brought the sociological phrase "the social construction of gender" to life. The vignettes forced me to be clear about the kinds of evidence I needed to support my thesis.

While reading and re-reading the observation protocols I knew that, as well as major episodes, there were many small incidents that had implications for the social construction of gender. I knew that, collectively, these "snippets" would provide powerful evidence. In previous

ethnographic work, I had highlighted, coded, cut and pasted such pieces. I explored computer programs that would save time with this task. I settled on The Ethnograph, an IBM compatible, computer program for analyzing ethnographic data.

While saving time in cutting and pasting, the computer program forced me to be more meticulous in coding than I might otherwise have been. I was forced to examine each line of data and to develop a finite list of code words. I used code words to indicate what was happening in an event, for example: "silencing," "violence," "helping." I used 98 code words for students and 53 code words for teachers. Each line and its code had to be entered into the program. This was a time consuming task, but the reward of retrieving pages of examples to support a specific code word, at the press of a key, made the work worthwhile.

Next, I turned to the interview protocols. Because the scripts were not as dense as the observation protocols, I decided against using the computer program and instead used coloured highlighters. I read and re-read the interview transcripts and wrote notes to remind myself how the interviews could be used with the observation material. I came back to the interview transcripts many times.

At this point in my work I was asked to write a chapter for publication based on my research. Although this took time away from writing the dissertation, in retrospect it

was a most helpful enterprise. Writing the chapter forced me to move to the next stage, that of re-presenting a piece of the information I had gathered to the academic community.

In re-presenting the information I grouped the codes into themes or categories. Through constant comparison of smaller segments and consideration of negative evidence, I was forced to rethink categories again and again. It was clear to me that the themes did not "emerge" from the text as some would have us believe. I consciously assigned categories derived from a feminist framework.

In deciding on categories or themes to re-present a picture of how gender was constructed in the classrooms, I went back into the literature and re-read many of the pieces I had used to frame the proposal. Again, the literature was more meaningful to me when I placed it in juxtaposition with my own research. Looking back over my notes I can see how the themes shifted and changed as my understanding deepened. When my advisor read my first draft of the chapter for the book, she said "You've got it!" No doubt she was as relieved as I was that my work was beginning to make some sense.

Taking my work back to the teachers was an important part of the analysis. I gave each teacher a copy of the observation protocols from her or his section, and a copy of his or her interview transcripts. Whereas all of the teachers showed an interest in my descriptions of life in

their classrooms, not all of the teachers found time to read the material in depth. As well, the teachers' knowledge and interest in gender and education varied. While none of the teachers asked that anything be changed or omitted from the dissertation, most tended to use the classroom observations to critique their own expertise in a subject area and to evaluate the students' performance, rather than to analyze how gender was being socially constructed in their classrooms. I felt that I lacked the sophistication necessary to engage the teachers in ideology critique, as suggested by Lather (1986).

Nevertheless, my discussions with the teachers led to helpful conversations about teaching which informed the analysis. For example, my concern about teachers not responding to boys' sexist comments was placed in a different perspective when a home economics teacher said that she was sometimes embarrassed by the boys' comments, and when technical studies teachers told me that they listened to the noise of machines rather than what students were saying to each other. The woodwork teacher told me that the sound of the machines was an indication to him that they were being used correctly and safely. Ideally, the research would have been strengthened if I had also given students the opportunity to provide "member checks."

At the end of the following school year I met with the teachers to outline the themes that I was using to frame the

dissertation. Again, the teachers did not ask for any changes or additions. Instead they disclosed examples from their present teaching that either supported or refuted what I was saying. The teachers' comments suggested to me that their sensitivity to gender issues in their own classrooms had heightened since last we met.

Although I gave careful attention to accuracy of findings, at best ethnographic accounts are only partial truths and are necessarily incomplete. I do not claim to speak about all coeducational home economics and technical studies classrooms, nor do I claim that the evidence presented here constitutes a complete, or the only, picture of the classrooms studied. Observations and interviews are mediated through conventions of research, and through the researcher's own lens (Atkinson, 1990), as is the writing and the reading of this dissertation. The information is presented as a beginning point of entry into understanding gender relations and classroom life. Readers must take it from here and mediate it through their own experiences.

CHAPTER 4

KNOWLEDGE AND COMPETENCE

This chapter deals with the students' responses to the home economics and technical studies program. It explores how students' previous gendered experiences interweave with their classroom experiences to produce traditional stereotypes about who can do domestic and technical work, thereby supporting traditional gender relations and social inequality.

The chapter is organized into three sections. First, I explore the intersection of the home economics and technical studies curriculum with the different experiences and preferred ways of knowing that students bring with them to the classroom. I discuss the students' views of domestic and technical work and their gendered sense of competence in each area. Second, I examine the students' responses to activities provided in the home economics and technical studies classrooms. Did requiring girls and boys to participate in domestic and technical work maintain or change traditional notions of who should be doing this work? Did it change the value assigned to female and male spheres? Third, I show how the students' regulatory practices around domestic and technical work support the notion that girls belong in and are better at domestic work, while boys belong in and are better at technical work, thereby supporting the gender division of labour.

Students' Previous Gendered Experiences

The students' previous gendered experiences interwove with their beliefs about who should do domestic and technical work and their sense of competence in each area. Interviews with the students raise questions about the fit between the home economics and technical studies program and the students' lived experiences. First, I will examine the students' comments about their experiences in domestic and technical work.

Domestic Work

As one would expect, all of the girls and a few of the boys were familiar with the language of food and sewing, and were already socially oriented to work in the home. The girls talked to me about their previous experiences in domestic work:

Tina: I already knew some of the stuff we made here. I could do it in a couple of hours by myself...like with my aunt I usually do everything in half an hour...I make muffins and macaroni and cheese, I already knew that years ago. I always make fried rice at home.
4-3(32)

Jill: Well at home the cloth is not cut. Like it's not already cut for me. [At home] we have to measure and all that to make our own clothing. 3-4(36)

Rita: My dad cooks and cleans and goes to work and everything. I like sort of help out, sort of like a mom does. Like I clean up and I cook and I look after my brother and sister cause they're little. 5-47(16)

Maria: I don't have time to watch television 'cause I work during the night time.

Tanya: You do?

Maria: Yeah, I help my mom 'cause she works. She cleans out these offices and it's pretty hard for her

all by herself. With this other lady she does like nine floors - and it's big - and I help sometimes. My sister has [my mother] babysit. She works at the restaurant where I work. 1-3(24)

Maria's comments portray a future where her extra-familial work would be an extension of her kitchen and add to her work load at home.

A few boys possessed some basic domestic skills. They told me they had learned sewing skills from their mothers in the home sewing industry, and cooking skills from women at home:

Trung: I already learned how to use the sewing machine. My mother taught me. I learned by watching my mother. I don't make stuff. I just mend stuff, rips and stuff. I just mend it. 11-1(53)

Thanh: Cooking was the easiest cause you have experience with it. You might do a little yourself or you might see your mom do it. I just cook for myself...eggs or something. 14-4(12)

For most boys domestic work was a new experience:

David: It's not difficult really. It's just knowing what to use I guess. I don't know some of those things that we use. Like she says to use these things and I forget. Just one little thing like a wooden spoon, and then she gets mad at me when I ask her what to use. 17-4(40)

Jaspal: I know how to iron pretty good now, better than before...Before it was hard to sew. Now it's easy, just putting the thing in. Like I didn't know which way to sew at all, it was confusing...I can thread the needle now and I can do those stitches on the outside and those on the inside. 15-3(22)

Being oriented to domestic work required using a specific language and the boys were not as proficient in its use as

were girls. A boy commented on the boys' and girls' proficiencies in domestic work:

Jaspal: Most girls already know how to cook and how to sew. You can watch them and learn something. Even on the first sewing day they knew what to do already, like for ironing....The food they made looked good. It looked better than ours. 15-5(28)

The girls' previous gendered experiences better prepared them for domestic work in home economics.

Technical Work

Both girls and boys had learned some technical skills in elementary school. The students told me they had previous school experiences working with wood:

Rita: I love making stuff out of wood. In my [elementary] school they had a woodworking class....I like making stuff and bringing it home....We made boxes and things, just boxes to put stuff in and to sit on your dresser. 5-38(3)

Danny: It's been fun. We did a whole bunch of stuff. I already knew how to make that stuff anyway. We did [woodwork] before [in school]. 10-1(24)

Some students had worked with wood and electronics outside of the classroom. A few of these students were girls:

Tina: We made a bird house. My dad taught me.
Jill: My sister's clubhouse fell. Just two months ago, in the summer, she wanted to build a club house for her club. I was helping her. It was mostly done, but then one of the nails fell and the whole thing fell right down. 3-33(1)

Jill: I did [soldering] two years ago.

LE: What did you do?

Jill: Almost the same as this at home on my own. Just fooling around. 6-2464

But most of the students who talked to me about working with wood and with electronics outside of school were boys:

Ptan: I've done woodworking. I've made boats, cars, pencil holders....My dad's kind of a mechanic and he has all the tools. 20-4(5)

Bao: It's fun. I enjoyed it when I was small. I worked with my dad he teached me. It's easy for me to do that. I learned in Grade 5 too. We made a totem-pole and a speaker box. I work with my dad as well, we fix the boat. 19-1(1)

Trung [to LE]: I did [a circuit] at home on a bread board. I used different capacitors, they were higher than the ones we have here and it blinked slower, and I found if I used a weaker battery it would blink faster. 6-2914

LE: How come you already know about this?

Rick: I learned with computers. I work with computers. I take things apart, radios, computers. 6-1066

The boys told me they also learned about electronics from television and from magazines:

Trung: My father brings home books on electronics, right. They are really meant for one of those electronic institutes. My dad brings them home, or borrows them from his friends. He gets them from work and I have to read them. 6-2939

LE: How do you know about this equipment?

Jay: We have them. It's just natural.

Trung: We watch TV. [Such as?] We watch "Beyond Tomorrow", "Discovery," "The World of Science."

Jay: We have them in our car and all that stuff.

Ray: They have books and magazines too.

LE: Do you buy them?

Trung: No, we just look at them in the library and stuff.

Jay: We just read them. 6-682

None of the girls talked enthusiastically about electronics. In trying to find reasons for the girls' lack of interest in electronics, I asked Maria and Tanya what they thought about electronics magazines:

Tanya: I saw this one I think. I'm not like really strong into computers.

Maria: I only look at - like fashion magazines.

Tanya: Yeah, that's what I look at.

Maria: And those teen magazines, like "Teen Beat."

Tanya: Like stuff that have like pictures of stars.

Maria: Yeah, especially the stars you like, but those - no - 'cause they look so boring. Actually if they look so boring on the front - Does this look interesting?

Tanya: If you were like - well, it looks hard doesn't it? Like all these wires. I don't know how people do it.

Maria: If I got this picture [inside of a computer] on a book - that picture, even with no writing on it - I wouldn't even open the book. Since it looks boring outside it must be boring inside.

Tanya: So complicated 'cause you don't know what the hell - 'cause they might tell you something about some kind of name in electronics and you don't know what it is. 1-24(31)

Maria and Tanya are convinced that electronics is "hard," "boring," and beyond their capabilities.

Most boys were already familiar with the language and some of the skills required in woodwork and electronics. Boys, more than girls, were already socially oriented to this kind of technical work.

Who Should Do Domestic and Technical Work?

In interviews I tried to find out the students' beliefs about who should do domestic and technical work. Vinh told me that women should cook because they are better at it:

LE: Why is it important for girls to learn how to cook?
 Vinh: They usually cook. Like in my family the women cook. My uncle and them will cook too, but mainly my aunt and my mom. All my cousins are women and they cook. They cook better too, so they should be cooking.
 14-6(7)

But most students said that girls and boys should know how to cook. The girls insisted that knowing how to cook was important:

LE: Of all the units which do you think will be the most useful to you in the future?

Tanya: I think foods. You have to cook. You have to. It's not like someone's going to serve you every single day for the rest of your life. 1-23(24)

Tina: If boys don't know how to cook then how could they live? And if you live by yourself alone, then you have to cook. Do you live by yourself?

LE: Yes. What about people who don't live by themselves? Who do you think should do the cooking then?

Tina: My dad does the cooking and my mom does - like prepare and all that stuff - and if my dad is really tired then my mom cooks. Like they each take turns cooking for us, 'cause I have another sister. 4-11(1)

And the boys told me that cooking was something they "might" need to know:

David: Maybe cooking will help you in the future, kind of thing. To help you cook 'cause your wife or husband isn't gonna cook for you everyday. You know you're expected to do your share. So cooking will help more. Some of [the boys] don't think that way but. 17-8(33)

Jaspal: Because when you move out of the house you need to know how to cook, or when there's nobody home and you are hungry you have to know how to [cook]. 15-5(10)

In talking about sewing most students reflected more traditional stereotypes. Most students said that sewing was important for girls:

LE: Is it important for girls to know how to sew?

Maria: Well, yeah, so we know how to make things later on.

Tanya: So we don't have to spend money, you know. Like if we don't really have enough money we can just make clothes....You could be like anything, like a nurse and your nurse suit - your thing - might rip and you might have to sew it up. You're going to have to do it when

you grow up anyways, or if you are rich you could buy a new one! [laughed] 1-14(27)

LE: Why do you say that it is important for girls to know how to sew?

Tina: 'Cause if they want to make their own clothing and the parents, usually the mom or the grandmother isn't there and you are stuck, and the fabric is ripped and you have to sew it by yourself. 4-5(24)

And, Trung said that sewing might be useful for boys:

Trung: You might have to sew something for yourself and you don't have other people to do it, so you can do it yourself. 11-1(43)

But most students said that sewing was not as important for boys. For example, although Bao and Ray both sewed well, they thought that women should sew for men:

Bao: It's a waste of time learning to sew. I'm not gonna use it. I'm not gonna be sewing. I get my sister to do it, or I'll buy a new one. I just know a little. That's good enough. 6-1303

LE: Is it important to know how to sew?

Ray: Sewing may be important if you move out and are not married yet, and have to fix your own clothes.

LE: What if you were married?

Ray: No, because I think the female should do the easy stuff. In my family my mom does that stuff and my dad works. 13-2(11)

To Bao and Ray sewing is "a waste of time" and "easy stuff," and they delegated it to women.

Some girls said that boys did not need to know how to sew because women would sew for men:

LE: Should boys know how to sew?

Tina: Only if they want to become a fashion designer.

LE: What about sewing their own clothes?

Tina: No, not really. I think their parents would do that for them, like their grandmother or their mother - like somebody older than them. 4-5(12)

LE: Should boys know how to sew?

Tanya: No.

Maria: Yeah, I think so.
 Tanya: No, you do?
 Maria: They should know how to do things too, you know.
 Tanya: I think - well not really. Like maybe in their lifetime they may never have to do it.
 Maria: Well, at least they've done it.
 Tanya: Well, maybe their wives (sic) will do it.
 Maria: Yeah, or their moms will do it. 1-14(36)

Although Maria, initially, said that boys should know how to sew, Tanya's comments caused her to think differently on the topic.

And Tanya and Maria disagreed about the division of labour in domestic work and child care:

[Following a discussion of how they would organize their paid work to look after their children-]
 LE: Neither of you have mentioned that the father could take care of the kids.
 Maria: I dunno.
 Tanya [loudly]: Husbands aren't supposed to stay home.
 Maria: That would be a good change, though. You need some time off for yourself because taking care of kids is - well I love kids and I'd take care of them -
 Tanya: I think the dad should go to work.
 Maria: Well, sometime he can take care of himself.
 Tanya: They have more strength - and - well, I don't know it's just the way it goes - like every family is like that.
 Maria: I picture myself that if the dad takes care of the kids then everything would go wrong - everything.
 Tanya: The dad buying the groceries? I don't know. I can't picture that.
 Maria: Dad changing diapers?
 Tanya: I don't know. Dad with the cart with all these kids...going through the groceries and kicking all the stuff - it's hard.
 LE: Why can't you picture men doing this work?
 Maria: 'Cause it isn't easy being a mother. She is going 24 hours.
 Tanya: Guys don't really know how to do anything...how to do all the stuff like...how about say they're irresponsible and abuse the kids and stuff?....'Cause you go to the grocery and you mostly see girls, you know like wives [sic] and mothers. You don't really see guys around the grocery. Mostly you know the husband tells the wife to get the groceries while they work.

LE: Do dads ever get groceries and things?

Tanya: No. My dad doesn't do that. I don't know why. Sometimes my dad drives my mom cause my mom doesn't know how to drive. So my dad drives my mom to the grocery store. Sometimes they go in together and shop, but mostly it's just my mom goes by herself, or with me. 1-18(27)

Whereas Maria's comments again suggest that she is beginning to think about the possibility of shared responsibility for domestic work, Tanya's comments reflect her acceptance of gendered norms. Both girls clearly value the importance of domestic work and child care.

The students' comments about domestic work reflect their daily experiences. Girls' and boys' daily experiences in families had an enduring influence on their views about who should do domestic work.

Similarly, most students held traditional beliefs about who should do technical work. Girls and boys questioned the appropriateness of technical work for girls. For example, although Lily was proficient in all areas of technical studies her comments reflect her acceptance of gender norms about who can and who cannot do woodwork and why:

Lily: The boys are better in woodworking, right? They are strong. They know how to use the things better than the girls. Like girls don't really know. Like when a father has a garage and everything, boys just like those things and they just go. 9-4(23)

Other girls made similar comments about their sense of competence in technical work:

Tina: You need a lot of strength. Like to make all this stuff. Like I like cleaning up, but like it's just too much work. You have to cut and shape and make it smooth and paint it over. I don't know. 4-2(33)

Tanya: I can't really believe I'll learn this stuff. It's so hard - so complicated. 1-11(48)

These girls emphasized their inadequacies in woodwork and electronics. They saw themselves as neither bright, strong, tough, nor skillful enough to do technical work.

Maria's comments were grounded in her own negative experiences with hand and power-tools:

Maria: In my case I don't like working with the big machines. My dad used them and he got hurt a lot of times. I'm scared of them especially when we had to put the duck and curve it around and I broke the needle (blade) when we had to curve it around. I didn't like doing it. My dad cut his finger like that. 1-15(1)

Only one student spoke positively about girls and technical work. Jaspal said:

LE: Is electronics important for girls?

Jaspal: Yeah. They should learn about it too, because they might need to use it one day.

LE: When would they use it?

Jaspal: On a boat maybe, or something, an airplane. I don't know. 15-4(53)

Although none of the other students said that girls should not learn how to do technical work, most felt that it was more important or more appropriate for boys. For example:

LE: Is it important for girls to take electronics?

Tanya: Only if they want to. Like if they don't want to I don't think they should have to.

LE: What about boys?

Maria: Yeah, it's good for them. My brother-in-law he majored in electronics.

LE: Why do you say boys should take electronics, but not girls?

Maria: Well, it's good for [boys] in the future. They already got a taste of [electronics] and of woodwork and all the other things for when they are older.

Tanya: Girls don't really want to -

Maria: Well, maybe some do.

Tanya: I know, but girls mostly don't want to.
 Maria: I guess they find it more of a man's job.
 Tanya: I'm not that tough.
 Maria: I certainly wouldn't be able to handle all of these machines. 1-15(1)

LE: What makes you think that girls don't want to take woodwork?

Danny: I dunno. Maybe the girls think that because it's gonna be really messy and gettin' all dirty and everything... 'cause all that sawdust and everything would get in their hair and on their clothes and stuff. They did okay, though. They went on with it pretty good and they still looked nice after. 10-3(11)

LE: Is technical studies important for girls?

David: I don't know. I don't think that any of the girls like it much.... You won't see many girls in woodwork or something like that. I just find that they have different interests. They probably like sewing... like they may take like sewing or foods, something that they like. Electronics would be something that guys would like, right?

LE: Why might guys like electronics more than girls?

David: I don't know - just something that happens. 17-7(43).

Because David did not see women doing technical work, understandably, he assumed that women were not interested in doing this work.

Most boys, however, did speak positively about the importance of technical studies for boys:

Vinh: Well, it teaches you how to make things for yourself, like drawers to put things in.... If you're really good you can make your own stereo or something. I don't know. 14-3(36)

Bao: In the future you could be a handyman or something, like when you have a house you can fix things, or maybe like a hobby - you can make things when you have nothing to do. 19-4(7)

Jaspal: Well, you might need [electronics]. If you have [a receiver] and you're in trouble or something you could get help. You need to know how to use the radio so you could call. I guess it's important to

know how it works. [Why?] Because it just seems that it is important. 15-4(42)

The students' comments about who should do domestic and technical work reflect their lived experiences. Many of these examples show the power of daily experience over what goes on in classrooms, and the strength of students' stereotyped notions about women and men.

Classroom Experiences

Classroom observations revealed the students' responses to the home economics and technical studies program. The students' classroom experiences intertwined with their previous gendered experiences and contributed to their sense of competence in domestic and technical work. Because home economics and technical studies were taught separately, I will examine each area individually. First, I will briefly describe the activities offered in the home economics and technical studies program.

All sections of home economics and technical studies, with the exception of family management, dealt mainly with some basic skills required in domestic and technical work. In home economics students learned how to prepare simple meals, how to operate a sewing machine, and how to do basic hand sewing. In technical studies students learned how to use some hand and power-tools, and the beginnings of pencil design and graphics.

In describing their courses to students, the teachers talked mainly about the skills that students needed to know in order to make certain products. The food and nutrition and clothing and textiles teachers said:

I don't intend to make you sewers....You may never sew again....I'd like to introduce you to a new machine. You learn to master the sewing machine. You control it - it doesn't control you. So you can all succeed....You are going to make a kite and a pincushion....We learn about the machine. Learn to master and control it and learn to make simple projects. 3-94

I'm trying to introduce you to what foods and nutrition is all about, and the importance of it. It just isn't cooking and eating....I want you to learn about why food is important for the body....I'm also going to teach you some basic techniques...how to make a sauce without it going lumpy....You will learn how to work safely in the kitchen....I teach you the Canadian way of tablesetting....It's not the only way or the correct way but if you are going to be working in food institutions then you will be expected to know the Canadian way. 5-2(47)

Similarly, technical studies teachers focused on products that the students would be making in the classroom:

If you are a good class you might make three things. [Holding up a bookrack] How many have VCRs at home? This will hold 6-10...tapes. [The teacher also showed students a note holder, in the shape of a duck, and a pencil box.] 2-137

You will make, and you have probably heard about this, a 'Happy Face.' You have to put together a working circuit. This will take most of the time....I guess there will be a few people not taking Electronics 9, therefore, I will include a unit on safety in the home. 6-148

You are going to design a clock face. You can make the face any shape you want. Then you have to decide what the numbers are like. Then you have to design the hands. You will have to think how easy it is to read the numbers and how attractive it is going to be. 4-654

The teachers placed emphasis on manipulative skills and techniques and on meeting standards defined by the teacher.

The family management section dealt with interpersonal relationships and family interaction. The teacher included discussions about gender issues. For example, when talking to the students, the family management teacher said:

I am asking you to think about the roles of women and men and to question them....I want you to be able to observe television critically and be critical of how that image is portrayed. 1-688

Gender issues mainly included gender roles and female-male relationships in families.

Home Economics

In the home economics classroom girls and boys typically worked separately. Despite this separation, there were similarities and differences between and among the girls and the boys in their responses to the home economics program. In the food and nutrition classroom students with previous experience in domestic work were more likely to work seriously and competently, and most of these students were girls. The following excerpt shows how Lily, Poonam, and Tina approached their work in the kitchen:

[Lily, Tina, and Poonam all wore clean, white aprons and their hair was tied back with ribbons. They were ready to start.]

Tina: Lily, can you roll my sleeves up for me?

[Lily obliged]

Poonam: Do we need a double boiler?

[Lily nodded]

Tina: Boil the water, hurry up.

Poonam: I already got the pot on.

Lily: Put a lid on.

[Lily inverted a large lid on the pot as the teacher had demonstrated.]

Poonam: Are we supposed to double [the recipe]?

Lily: I think we are.

[Lily collected ingredients from the teacher's supply table, using a tray as the teacher had told them to do. Poonam read the recipe. Tina got out a double-boiler for the sauce. Poonam put pasta in the pot, replacing the lid. Poonam then filled the sink with hot soapy water ready for the dishes. The teacher came into the unit.]

Teacher: No lid! Remember what I said [to leave off the lid while cooking]. How much oil did you put in [the pot]?

Lily: I didn't. She [Poonam] put it in.

Teacher: Was the water boiling? Who put the pasta in?

[The teacher was interrupted by David asking for help. She moved to David's unit. The girls were silent for a few minutes. Tina sliced carrots. Lily washed dishes. Poonam measured flour for the sauce.]

Lily: That's not flour! That's [powdered] milk!

Poonam: No it isn't, milk's over there.

Lily: Oh.

Poonam: The oven's not on, you guys.

[Lily turned on the oven. There was some confusion about how hot the oven should be. Tina raised her hand, trying, unsuccessfully, to get the teacher's attention. Poonam set the table, following the teacher's directions. Tina confidently drained the pasta and poured it into serving dishes. She put the dishes in the warming oven. Tina poured juice for the group, including the boys in the adjoining unit. Poonam washed the dishes, Lily dried, and Tina put the dishes in the cupboards. They all cleaned and dried the counter before sitting down to eat. Tina put the pasta dish on the table. Lily gave napkins to each person, including the boys in the adjoining unit.]

Poonam: What do you serve it with?

Tina: What do you think - a spoon!

[Tina served the pasta to each girl.]

Tina [to Poonam]: Soak the dish.

[Poonam soaked the dish in the sink.]....

[After the meal Tina washed the dishes, Poonam dried them and put the dishes away. Lily swept the floor, meticulously. Tina lifted her feet as Lily came by with the broom. Lily swept under my chair.]

Lily [to LE]: It's clean - just to be sure.

[Poonam wiped the counter and dried it with a towel.

Lily wiped the counter underneath the heat resistant mat by the stove. At some point, all three girls wiped and dried the counter, dried the sink, and polished the taps.]

Tina: Miss [name of teacher] we're ready to go!
 Teacher [glancing in the unit]: Okay, go.
 Tina [smiling]: Yeah, thanks.
 [Tina, Poonam and Lily, carefully, folded up their aprons and ran out of the door.] 5-47(8)

Lily, Tina, and Poonam dovetailed their tasks and went to each other for help when in difficulty. They were nervous about making a mistake and they corrected each other when the teacher's or their own expectations were not met. The girls emphasized standards of cleanliness and efficiency in domestic work.

A few girls participated in domestic tasks as if they were playing a game. Jill and Tanya usually worked this way:

[Jill and Tanya listened to the teacher's instructions. They were wearing clean, white aprons and their hair was tied back with elastics provided by the teacher. They were ready to begin.]
 Tanya [rearranging her hair]: I feel like a total fool.
 [The teacher reminded students of their "housekeeping" duties.]
 Tanya: I get to sweep. Ugh!
 Jill: Everybody has to wash their hands.
 Tanya: I washed mine. Are you satisfied? I'm gonna fix my hair and then I'll wash my hands again....
 [At the end of the lab.]
 Jill: Now I have to dry the sink. [Jill dried the sink and polished the taps.]
 Tanya [sarcastically]: I'm housekeeper. I've got to sweep the floor. It's so bad!
 Tanya [sweeping around the unit]: There's totally nothing to clean on the floor. I always sweep at home, but not with a brush like this broom. 5-16(08)

Although Tanya responded less enthusiastically to work in the kitchen than Jill, she still conformed to domesticity. This example shows how peer pressure produces social expectations of gender.

Other girls were not so enthusiastic about their work in the food and nutrition classroom. Maria and Jennifer usually carried out their work routinely:

[Maria and Jennifer talked and laughed together in their unit at the beginning of class.]

Teacher: Stop and listen when I am talking!

[Maria and Jennifer stopped talking, but continued to laugh quietly together as the teacher gave instructions for the lab. When the teacher had finished speaking, Jennifer went to the supply table to collect the ingredients while Maria got out the equipment.]

Maria [holding up two bowls]: Which one do I use?

Jennifer [pointing to the large bowl]: That one.

Teacher [to class]: Have you turned on your ovens?

[Maria turned on the oven. Jennifer arranged the ingredients on the counter and wiped the tray before putting it back in the cupboard. Maria filled the muffin tray with paper cups while Jennifer measured and mixed the ingredients together. Maria watched quietly as Jennifer mixed the batter and filled the cups. Maria washed the dishes as Jennifer finished using them. While doing this the girls were very quiet.]

Jennifer: What do we do? Do we just put it in the oven now?

Maria: Yeah, I guess so.

Jennifer: How long? Maria, how long for?

[Maria shrugged. Jennifer put the tray in the oven. Maria finished washing the dishes and wiped the counter. Jennifer put the dishes away. When they had finished they both sat down beside the stove and watched the muffins through the glass door of the oven. Jennifer filed her nails as she waited for the muffins to bake.]

Jennifer: What time does [the dance] start?

Maria: Seven, I think.

Jennifer [taking a toothpick and testing the muffins]: The lady who did my hair said if I didn't like it she would do it better for me. Leave [the muffins] for just a few minutes, just to be sure.

[Maria stretched and yawned. She filled the sink with water ready for the muffin tin.]

Jennifer took the muffins out of the oven and arranged them up into two groups.

Maria: We need to wash [the muffin tin] up.

Jennifer: I'll get a dishcloth. Are you going to wash or do you want me to do it?

Maria: I'll do it.

[Jennifer sat quietly at the table while Maria washed and dried the muffin tin. She put the muffins into

paper bags for them each to take home. Without waiting for the teacher to check their unit, Jennifer and Maria left the room immediately when the bell rang.]
[5-14(34)]

What struck me here was how Jennifer and Maria had adopted the routine of domestic work. They carried out their work without comment, or they talked about other things. The classroom activity did not provide a challenge for these girls. Nor did they appear to achieve any satisfaction from it.

Students who lacked previous experiences in domestic work had more difficulty in the food and nutrition classroom, and most of these students were boys. Most boys lacked the knowledge and skills that the teacher expected of them:

[David and Anthony were making cinnamon biscuits. John and Jaspal were making cheese biscuits. They worked in the same unit. The teacher came into their unit.]

Teacher: Now why isn't somebody working there [space at the counter]? [To David] Work up at the counter, not at the table. You need a fork to mix it with, not a wooden spoon, and get your pastry board out. Once it starts to form a lump take it out and put it on the board, like I did. Then add some liquid to the bowl. Jaspal [to John]: How do you chop the cheese up [for the biscuits]?

John [describing a grater]: You use the thing you chop it with. You know, like carrots. You sort of slice it.

Teacher [taking David's dough out of the bowl]: Okay, knead it then. Where's your recipe? Get kneading. [Teacher left the unit.]

David: 'Knead,' what's 'knead?'

Anthony: I dunno. Beat the shit out of it man. Beat the shit out of it, to make it stick together.

David [squeezing the dough in his hands]: It's weird, weird.

Anthony [adding water to the dough in David's hands]: Hey, add some water.

David [holding up his hands stuck with dough]: Oh, that's gross man. See man. It's wet.

Anthony [impatiently]: Mix it in man, just mix it in.

Teacher [returning to the unit]: You've got it too wet. I said, just add a little water, not make soup. When I say 'a little' I mean a little. Add slowly and sprinkle. When are you boys going to get organized? You're supposed to get all of your ingredients out at once, with your tray. Find out what you need first. [The teacher noticed that Jaspal was using a wooden spoon to mix his dough.] You don't work with a wooden spoon. I said use a fork!

Jaspal: Does it really matter though?

Teacher: Yes it does. I said toss lightly - that's a different technique - with muffins, I said use a wooden spoon.

Anthony [to teacher]: Do you know where we get the cinnamon?

Teacher: It's in your unit.

Stuart [came to the teacher from another unit, bowl in hand]: How come it's [the dough] so dry?

Teacher: Take it out of the bowl and put it on your board. Then add liquid to what is left.

Stuart [stayed in the unit, added water to his bowl making the dough very wet]: Where's the flour? Somebody's swiped the flour? Get me some flour!

David: It's right there. [David added flour to Stuart's bowl]

David [to teacher]: Do we roll it out now?

Teacher [loudly]: Where are your instructions?

David [impatiently]: I know. I'm just saying do we roll it out now?

Jaspal [to teacher]: We need your help. It's not working. 5-27(42)

This example highlights most boys' lack of knowledge and experience in domestic work. Jaspal's question "Does it really matter though?" is an important one. Because the work was unfamiliar to him he was able to raise a question that did not occur to those for whom the technique was taken for granted.

Unlike girls, many boys found the teacher's standards amusing. For example, students were expected to set a table and to sit down as a group and eat the food they had

prepared. Most girls did this quickly and without question. They knew what they were expected to do. For most boys, this was a new experience and they reacted in different ways:

[Jay, Thanh, and Vinh were setting the table for "breakfast," occasionally looking at the teacher's directions pinned on the wall of each unit. Jay put paper napkins under each fork. He put cups on the table and mistakenly put tea plates instead of saucers under each cup. Thanh did the same at the other side of the table.]

Thanh: What do we need these ["saucers"] for?

Vinh: I dunno. In case you get the table wet.

[Jay arranged triangles of toast on the side of each plate as the teacher had done.]

Thanh: We forgot cherries [for the fruit salad].

Jay: What do we need cherries for?

Thanh: I dunno. For decoration, I guess.

[Jay put cherries on top of the fruit salad. Thanh brought the omelettes to the table. He began to fill the sink with water for the dishes as the teacher had told them to do.]

Jay: Wash later - eat now! We have lots of time.

Enjoy! [The boys sat down at the table.]

Jay: We forgot coconut.

Thanh: I hate coconut.

Vinh: There's supposed to be a spoon here.

Jay [laughing as he used a serving spoon to stir his hot chocolate]: Who cares!

Vinh: What's that [knife by the plate] for?

Jay: I dunno. It says up there [diagram on the wall].

Vinh: What do we eat with?

Thanh: I dunno.

Jay: This [fork] is too small. Pass me another one.

[Thanh leaned across to the drawer and retrieved a large fork for Jay.]

Jay: Are we supposed to show [the teacher] before we eat?

Vinh [laughing and rearranging his eggs as if they had not been touched]: Oh Oh!

[The teacher came into the unit]

Teacher: These are bread and butter plates! These [holding up a saucer] are saucers.

[Boys started to laugh.]

Teacher: And that's a serving fork, it's not for eating with!

Jay: It was in [the drawer].

[Boys laughed]

Teacher: Everything has a purpose. So think. It's not funny! [The teacher left the unit.]
 Thanh: Who wants more fruit salad?
 Boys [laughing; in unison]: I do, I do.
 Jay [to Thanh]: You're eating with a spoon and fork!
 [Boys laughed]
 Thanh [laughing while he cut the marshmallows in his hot chocolate with a large knife]: This is fun!
 Vinh [emptying the left over salad into his own bowl]: Want some, Thanh? I guess not.
 [Boys laughed] 5-38(10)

Again the boys' questioning of the everyday helps to keep domestic work in perspective. The girls, on the other hand, rarely questioned the ordinariness of domestic work.

Although most boys were intent on meeting the teacher's expectations in domestic work, none of the boys emphasized domesticity. Jaspal and Patrick usually did what the teacher asked:

[All of the students had left for lunch, except Jaspal and Patrick. The boys were still cleaning up:]
 Teacher [looking at Jaspal's pizza pan]: I call that greasy. Do you call that clean? Get some 'SOS' and go after that. [She showed Jaspal how to use the 'SOS' pad.] Rub hard. Can you see the difference?
 Jaspal: Oh, yeah.
 [The teacher left the room. The boys continued cleaning for about ten minutes. They washed all of their dishes, put them away in the cupboards, rinsed the sink and wiped the counter top.]
 Patrick: Okay, let's go.
 Jaspal: Yeah. Hey, the chairs have to be put up.
 [The boys put the chairs on the tables before leaving.]
 5-67(50)

Other boys, like Stuart, did enough work just to get by:

[Stuart was washing dishes. He used a drainer on the counter, without a tray underneath. The water was running from the tray on to the counter and over the boys' books, left on the counter. Dirty dishes were in the sink, on the counter, and on the table in the unit. Hung brought his own plate to the sink.]

Stuart: Take off all the food! You don't put them in the sink that way! Go get some towels to dry with.
 [David collected the placemats, shook them over the table and the floor, and folded them neatly. Stuart washed the frying pan. Hung dried the dishes.]
 Stuart [to Hung]: Put it on the bottom so [the teacher] can't see it. Clean off the table, that's what she checks.
 [Hung put the plates in the cupboard. He placed them haphazardly.]
 Chau [to Hung]: Big ones [plates] go with big ones.
 Stuart: Hey guys, clean off the table buddies. Just wipe it off.
 [Ray wiped the table with a cloth, caught the crumbs in his hand, and then let the crumbs fall to the floor.]
 Stuart: Miss [name of teacher] can you check us?
 Teacher: Are you ready?
 Stuart: Yes, right on time. 5-39(39)

Although Stuart was the perpetrator the other boys complied with doing the minimum amount of domestic work required by the teacher. Noteworthy here is the boys' lack of knowledge about domestic work. For example: Stuart did not use a tray under the dish drainer; Ray had adopted the routine of catching table crumbs in his hand, but then dropped them on the floor; and, unlike the other boys, Hung did not know to scrape off his plate before putting it into the sink, or how to stack plates in a cupboard.

Some boys were reluctant to engage in domestic work in the kitchen and were continually chastised by the teacher:

[Jaspal, Patrick, David and Anthony worked as a group. After the meal, Jaspal and Patrick washed dishes while David and Anthony sat talking at the table.]
 Teacher: David, can't you do anything but sit? There are jobs to do. You're housekeeper, sweep the floor!
 [David picked up the broom and wafted it, aimlessly, across the floor. He didn't use a dustpan, but directed the crumbs into the middle of the room.]
 Teacher: Anthony, just because you're finished mixing, doesn't mean your work is finished.
 Anthony: So.

[Anthony remained seated. David joined Anthony, holding the broom as he talked.]

Teacher: Anthony, you have done nothing for twenty minutes. I expect you to help the team.

Anthony: What do I do?

Teacher: You're supposed to support the team. [The teacher moved to the girls' side of the room.] I think you are almost done, girls!

Anthony: The bell's gonna ring and we're not gonna be ready.

[Jaspal and Patrick continued to wash the dishes. The counter and table were sticky with dough and covered with clean and dirty dishes.]

Teacher [to Anthony and David]: You had better get busy and help. The [oven] light's still on, the stove's not clean. Get busy!

David [to Jaspal]: Anything else you guys?

Jaspal: Yes, you dry.

David: I'm not gonna dry. I'm the housekeeper.

[David returned to Anthony at the table. The bell rang. All of the girls left the room. All of the boys were still cleaning up.]

David [picking up his books]: I have to go. I have a math test.

Anthony: Talk about unorganized people.

Teacher: Well, why don't you help them?

David: What could I do?

Teacher: Well, is the light off? Is the stove clean? It's not!

David [slamming his books down]: I'm getting pissed off. I have a major quiz today. Two quizzes in one day!

Anthony [pacing the floor]: We're gonna be late.

Teacher: Okay, Anthony you can go. Your mark's pretty bad anyway. I think you boys better read your duty schedule about what to do.

[The teacher took the towel from Jaspal.]

Teacher: Okay, off you go too, but that isn't done properly. It's dirty behind the sink, the sink isn't cleaned out, and the floor is a mess! [The teacher wiped the crumbs and water from behind the sink, cleaned the counter, and rinsed and dried the sink ready for her next class.] 5-31(14)

This example illustrates how most of the boys were less self directed in domestic work. Most girls, probably because of their previous experiences in domestic work, or perhaps because they were less resistant to it, were able to

coordinate their tasks and usually helped each other more readily than most of the boys.

In clothing and textiles girls and boys were equally accomplished at sewing, but demonstrated their interest in this kind of domestic work in different ways. Most boys were more outwardly enthusiastic than most girls. Most boys said they loved what they were doing, they raced to finish first, jostled for the teacher's attention, and talked often about who, among the boys, was going to get the highest mark, and who was going to win. The girls' enthusiasm was different. Whereas some girls said they were bored in the classroom, they talked to me and to each other about their interests in fashion and in making clothes.

For example, the students had to practice using the sewing machine by sewing on paper. Though one girl said she enjoyed what she was doing:

Tina [sewing on paper]: That was fun!

Jill [disgusted tone]: It's fun?

Tina: I've never done that before, that's all. 3-335

Most girls were not similarly enthused:

Tanya: We were making clothes [in previous school].

Jennifer: Yeah. What do we do - sew paper.

Maria: Are you bored, Tanya?

Tanya: Yeah...I'm finished. It's so boring.

Maria: So am I. 3-1375

Most boys, on the other hand, were excited about sewing:

Jay [sewing on paper]: I love it! It's fun. 3-592

Rick: Isn't it weird when you put [the stitch regulator] on different lengths? 3-727

Stuart: Wow. A computer in a sewing machine.

Rick: I know. Computerized patterns. 3-3698

And in finishing first:

Stuart: Are you at the last part yet, Danny?

Danny: Yes.

Stuart: Which one?

Danny: Second one - third small one - I haven't made a mistake yet.

Bao: I bet.

Danny: I haven't.

Stuart: Winner! I'm done. Are these the only sheets we do? 3-1009

Rick: I'm finished.

Teacher: Good Rick. What are you going to do now?

Anthony: Damn it. Rick got finished before me. Shit face. 3-4986

As well, some of the boys turned everyday events into

competitive activities:

[Jay, Stuart, and Danny were pinning their kite pieces together.]

Stuart: Those are my pins!

Jay: No, they're not, I didn't take them, man.

Stuart [taking pins from Jay]: Let's see three or four that's it. [Looking under the table] I've found two or three!

[Danny, Stuart and Jay scrambled on the floor looking for pins.

Bao [looking bored with the boys' behaviour]: There's a whole bunch of pins on her desk. You can use them.

Jay [arranging shears in a line beside his work]:

People don't steal my pins and get away with it. See Bao, I have a line of defence. Come near me and die!

Stuart: Found two more pins [on the edge of a sewing machine]!

Jay: They're mine.

Stuart: Too bad, they're mine! [lifting up the head of a sewing machine] I've found more!

[Stuart went around the room looking for pins under the sewing machines.]....

Stuart [returning]: I started with one pin today and now I have lots.

Jay: You scab, give me some!

Danny: From where?

Stuart: Over there, by Vinh and them. They don't check under their machines.

Danny [angrily]: I have fucking lots anyway.
[Throughout, Bao sat quietly quilting.] 3-55(43)

Bao's interests and domestic skills differed from those of the other boys in his group. His ability in sewing did not go unnoticed:

Danny [to LE]: Bao's really good at sewing and he's always the first one finished. I haven't seen no girl finish before Bao. 10-3(8)

The students varied in their response to the activities offered in the clothing and textiles classroom. Stuart told me he wanted more creativity:

I wanted to mix the colours but [the teacher] wouldn't let me. 12-2(28)

Danny talked about wanting to make other things:

[Looking at senior work] What's this? It's nice....I wanted to do that bag, man. I wanted to make that bag instead of this kite....When you get to Grade 12 you can come in here and do what you want. 3-3894

But it was mostly girls who wanted to make objects that they perceived as being more useful and more interesting than what they were doing in the classroom:

Rita [looking at a poster]: I want to make a poodle skirt like that. 3-1516

Maria [looking at senior projects]: Look, they're all making shirts. 3-3673

Lily [to LE]: They always make kites [in Grade 8], but I want to make the Grade 9 bag....I don't want to make the kite. It's very useless. You're not going out and play with it. It's just - just decoration. It's no good. 9-7(35)

The different responses to the clothing and textiles section of the program suggest that most girls were more sophisticated in their interests than most boys. For most

boys sewing was enjoyable because it involved knowing how things work and because they made it into a competitive activity. Girls and some boys, however, were more interested in clothing itself than in the activities offered in the program.

The family management section of the program involved different knowledge and competencies. Students were expected to share their personal experiences in the classroom. Although only a few girls and boys actually participated in this way, only a few of the girls said they objected to this approach, whereas many of the boys did object.

In the family management classroom, some girls talked openly about their daily lives:

[The teacher was talking about combining paid work with work in the home.]

Rita: My mom works. I don't live with her. She buys food for the microwave and she just puts it in. She doesn't make a big deal of it. She has a little baby and she goes to work. 1-616

[The teacher was talking about whether a woman should change her name when she marries.]

Melanie: My mom is engaged and she is keeping her name the same as my dad. 1-1395

[The teacher was talking about smoking and health.]

Jennifer: After my grandfather committed suicide my grandmother quit [smoking]. She can hardly breathe. She only has one and a half lungs. 1-1467

These comments illustrate how the girls related the classroom discussion to their daily lives. Most boys did not participate in this way.

Girls and boys who contributed to discussion in the family studies classroom risked being ridiculed by the dominant boys:

Danny [to teacher]: What if a mom doesn't have her kids living with her?

Stuart [laughing as if making fun of Danny]: Well! Who do you live with then?

Danny [shouting, looked hurt]: My mom! 1-1577

In interviews, students talked about their difficulties in disclosing personal experiences in the classroom. For example, Jill said:

Like you don't even know these people real well. You only know them by names and it's kind of scary.

3-31(2)

However, most of the students who objected to talking in class about personal experiences, were boys:

Bao: Sometimes it's too personal. I just put down anything. I don't want to answer. We have to talk about your children or something. We don't know what is gonna happen in the future. It's hard to talk about when you're not there yet. I don't mind the big circle - that's okay, but in the small circles most of us don't want to talk - too shy or something. I don't mind talking as long as it's not too personal. 19-1(5)

Trung: It was hard trying to express myself. I find it easier talking about other people than myself....I don't usually tell other people about my feelings. I keep it to myself. 11-1(33)

Ptan: Sometimes you feel so nervous because you say stuff that is really intimate, really deep inside yourself. 20-11(5)

Vinh: You have to talk about those things that you don't really know. About your family and everything that happens if you are having trouble, or if you win the lottery or something. None of that happened to me, so I don't know anything. 14-4(21)

Some students wanted to engage in activities other than those offered in the family management classroom. For example, Rita wanted more personal writing in the course:

Rita: It's kinda boring. I like assignments, but she doesn't give us that many. Like we started one. We had to write about me. I liked that one. I like writing stories and stuff like that, but she doesn't give us many. 5-43(9)

Other students wanted to talk about topics they perceived as more relevant to themselves:

David: We could have discussed other topics, 'cause we did mainly the family. We didn't discuss school or stuff like that, or what you're gonna do. 16-4(28)

Still others students wanted activities other than talking and writing:

Danny: Family management should have been more than sitting down and writing and stuff. Should have been more like acting out things. It would have been a lot funner and exciting for us, 'cause we just talked. 10-4(27)

One of the difficulties for the family management teacher was providing for the students' varied interests and abilities. The teacher did not deal with the difficulties many boys had with personal expression in the classroom, and did not take the notion of experience far enough for other students, especially girls.

Given the cultural diversity of the students, I was interested in finding out whether the students felt that their own knowledge and experience had been included in the home economics curriculum. Bao was the only boy who talked at length on this subject:

Bao: Most of it's the same, but in my family girls do all of the work - cooking, washing, and cleaning the house. But the [family management] teacher says that's not fair....I'm used to it. My sisters don't mind, they don't complain...I have four sisters - there's not much work. 19-1(18)

Bao's comments suggest that the family management teachers' discussion about the division of labour conflicted with his own experiences. This example also illustrates the difficulties the family management teacher faced when talking with students about the sexual division of labour.

Most girls did talk to me about the differences between what they did in the home economics classroom and their daily lives. For example:

Lily: Well, our religion. But sometimes our religion, I don't really like it and my parents worship those things - Buddha and those things, and I feel like 'Why are we doing this?' I sort of like the Western better. 9-6(43)

Rita: Well, I live with my dad and my brother and sister. So when everybody talks about their brothers and sisters and their mom and dad in the big house, it's different because I live with my dad, so it's not the same. Like they say 'You ask your mom' to do this, your mom and all this. Like with me, it's my dad all the time. But, I lived with my mom so I just think of that. Like she's my family too, you know. When they say 'What does your mom do?' I think of when I'm at my mom's house. I think about what she does. Then when I talk about my dad, I think about my house. 5-46(22)

Tanya: I knew how to make all those things.

Maria: Just the pizza crust. I didn't know how to make the crust. We just usually bought it or ordered a pizza.

Tanya: That's true. 1-12(15)

Tanya: The counters so clean and everything's so nice and neat and you know where everything is. It's just not like home - it's different. Like you're with your friends and all that, but when you're at home you make it by yourself and you eat by yourself. You don't have

to set up the table all so nice with mats and put where the forks are, and everything.

Maria: And I don't eat with my family and all that. We just eat when we have time. 'Cause sometimes my mom isn't back from work yet, so I'm usually by myself. I usually eat by myself.

Tanya: All I do is grab a fork...like I don't go like put napkins and - [laughed].

Maria: Imagine setting the table just for one.

LE: Do you think you should have to do that in school? Maybe that's not important anymore.

Maria: Well, if someone special is coming. Oh, you mean at school.

Tanya: School learning and all. Like how to set the table if you have a party or something.

Maria: Well, you'll know what to do. 1-12(26)

The students' comments support concerns raised in the literature about home economics curriculum being rooted in Western, middle-class assumptions. Bao and Lily did not have an opportunity to explore their cultural traditions in the classroom. Rita negotiated her way through discussions of family living that left her family marginalized. Tanya's "school learning" bore little relation to her everyday life. In avoiding the realities of everyday life, the home economics curriculum fails to engage students in re-examination of their own lives.

I asked students whether they would have liked to have had more of a chance to talk about their own and other cultures in the home economics classroom. Some girls spoke readily on this topic:

Lily: We mostly talked about Western culture. I think it would be nice - it would be interesting - to know about other cultures - how you can make other cultures better. Because when you only stick to your own you think it's not that good and you don't know how lucky you are. 9-6(20)

Tanya: I don't think we should make all Canadian food....We should make some from Italians, one from Chinese, one from Vietnamese, one from Canadian....It's kind of pretty hard in six weeks, even though I think we should get a chance to learn about the others.
1-32(51)

Maria: Yeah, in family management, 'cause all they referred to was Canadian people and some Chinese. It seems like they had forgotten about Spanish and Egyptian, and all that stuff...but, it is too many if you have different kids in the one class. 1-32(5)

Tanya: We made fried rice - sort of English style.

Maria: Yeah, the way Miss [name of teacher] prepared it, it wasn't very Chinese at all. 'Cause when I go to the Chinese restaurants they put shrimp in it.

Tanya: You do not put ham in it. No way, not ham.

Maria: She put ham.

LE: You would never put ham in Chinese rice?

Tanya: No never. I eat hot stuff...like we like tons of hot stuff. I like really hot stuff. 1-31(27)

I asked students what they would tell the class about their own lives, given the opportunity. Ptan, Maria, and Poonam were interested and excited about their own knowledge:

Ptan: Vietnamese food, um fried fish in this kind of sauce. It's kind of like an orangey sauce, and shrimp, fried shrimp, and kind of like a watery bowl of vegetables with some kind of herb you put in there. You eat it with the shrimp and everything. Crab, corn soup, a whole bunch of things....We eat some kind of parsley, kind of like a mint, some kind of mint, a minty thing, it's green, all green, a whole bunch of leaves and we eat it. Yeah, it gives it a minty taste.
20-14(15)

Maria: Well, my favourite food is this empanadas...it's like dough. There's meat in it, boiled egg, one olive, some raisins. Mexicans also have this....There's a soup...it's corn, potato, and squash, not squashed up - just pieces, and little bits of macaroni, the small kind. 1-32(22)

Poonam: I would tell them about the religion that we talk and what kind of clothes we wear. Mostly it's shiny material like when we go to parties. Like my mom, she wears a sari, right? It's just a long piece of material that has different designs. It's almost

like a skirt, but it goes all around the waist part and over your shoulder - there's this long thing that comes over it. 2-3(13)

These comments were particularly meaningful because Ptan, Maria, and Poonam were usually very quiet students, but on this subject they spoke confidently and enthusiastically.

Given the opportunity to talk about their own experiences, girls and quieter boys, might have developed confidence and voice in the home economics classroom. The students might have been challenged and enthused by an approach which gave them authority as learners.

However, bringing students' experiences into the curriculum is not straightforward nor without difficulties. Most boys and some girls were reluctant to talk about their own lives. For example, when I asked the students if they would have liked to have had an opportunity in family management to talk about their own past experiences, some boys said:

Vinh: No, not really. It's too hard. I don't really remember anything. It's too hard to talk about when you don't really remember anything. You don't really remember that much when you are so young. 14-9(27)

Bao: No, I wouldn't. It's a personal thing, I guess. I don't want to talk about the past. It's not that bad, it's okay, but I don't know, maybe people aren't interested. People my age want to talk about the future. Maybe they think that talking about the past is too old fashioned. I don't know. Some people might be interested, but some people don't want to talk. They want to forget it. Some people if they have never been in the war they would be very interested to know what it is like, but others don't want to remember. 19-2(9)

The boys' comments serve as a reminder that students' experiences can be painful, thus calling for a supportive classroom environment. Their comments also warn of the dangers of a white, middle-class, "tourist" approach to cultural experiences.

Students' comments reflect the diversity of girls' and boys' interests, experiences, and ways of knowing. The teachers' procedural, technical approach did not allow such diversity to be revealed in the classroom.

Technical Studies

Students' responses to activities offered in technical studies reflected their previous gendered experiences and their gendered sense of competence in the area. The potency of students' previous gendered experiences was most noticeable in the woodwork and electronics classrooms, where, unless directed by the teacher, girls and boys usually worked separately.

Diversity in students' sense of their competence in woodwork and electronics was most evident when the students helped each other. Girls helped girls:

Poonam: I can't do this [sawing].

Jill: You're a beginner, that's all. 2-1224

When Poonam was using the saw, Tina noticed that Poonam's wood was not in the correct spot. Tina gently pushed it over into place. 2-1796

And, occasionally, girls helped boys:

John splashed the brush as he varnished his box. Jill took the brush from John and quietly showed him how to

varnish. John copied and varnished without splashing.
2-1505

[Maria was drilling a hole in John's piece of copper.]

John: Are you sure you're supposed to poke a hole in the copper?

Maria [sarcastically]: Yes, you're supposed to poke a hole in the copper.

[John watched Maria, carefully. He then took over]

Maria: It's okay. You don't have to be scared. 6-1259

However, boys who had previous experience in technical work assumed positions as regular helpers in the woodwork and electronics classrooms. Girls, boys, and the teachers sought the help of these boys:

Stuart: Bao, what do we do now?

Jaspal: Yeah, Bao what do we do next?

Bao: I dunno. Solder on the face here - the smile.

Jaspal: That's hard for me. I need to do my other thing. [He returned to his own bench.]

Stuart: Do we have to strip it?

[Jaspal returned to Bao.]

Jaspal: Bao, what do I do next?

Bao: Get the wire.

Jaspal: Which colour? 6-2121

Trung: Okay, Vinh watch. Hold the wire. Hold it higher. Solder it there. [Trung showed Vinh how to put the solder on the wire.]

Vinh: What do I do now?

Trung: Solder it. Try it.

Vinh: You mean you're supposed to do that?

Trung: Don't waste the solder.

Vinh: That isn't solder.

Trung: Yes, it is. You do it now. Remember what I showed you.

Vinh: No. You go away for a minute.

Trung: Melt the solder first and hold up the wire.

Vinh: Who cares?

Trung: If you want a better mark you do. 6-2721

Also, the electronics teacher asked these students to help other students:

Teacher [to Bao]: Did you help Jim [new boy] get started?

Bao: Yes.

Teacher: Oh, good. He knows what to do now. 6-1299

Danny: I'm finished, but there's something wrong with it.

Teacher: Bao, will you have a look at it with him?
6-3113

Teacher: Rick can I get you to work with Tanya?...Trung will you work with Maria?...[To Vinh] Do you want to give [Tina] a hand. Just hold it while she finishes.
6-3131

And the same group of "experienced" boys did extra work on the side for the teachers. For example:

Danny [fixing teacher's lamp]: I know what's wrong with it. It was right here. I resoldered it and it started working.

Teacher: It works now?

Danny: Yes.

Teacher: Good show. 6-3477

Gradually, the more competent students became more confident in the woodwork and electronics classrooms. Most of these students were boys.

I do not mean to suggest that most of the boys were excited and knowledgeable about woodwork and electronics. There were differences among boys in their level of interest and knowledge in these areas, as the following conversations show:

David [to Ptan]: Where do we sand?

Ptan [irritated at being disturbed]: No problem.

David: Is this the side that has to be cut off?

Ptan: No, any side.

David: Do I sand here or any side? Which one?

Ptan [becoming angry]: The one you don't like. Get rid of the one you don't like.

David: I was asking about sanding. Which one?

Ptan: Any side!! 2-1946

[Bac called solder "wire."]

Trung: Solder's not a real metal. It has a different melting point than wire.

Bac: It's an alloy in other words.

Trung: Well, those two metals have a different melting point and when they are mixed together they have a lower melting temperature.

Bac: Where do I get the wire?

Trung: I told you it's not wire! 6-2882

Jim [laughing]: John called them 'jumper cables.'

Anthony: Well, that's what they are. They are mini-jumper cables 'cause they have a negative and a positive. 6-3768

Rick: Hey, you know the solder. You let it drop on the water. You melt it and wow.

Anthony: I'm gonna wire the whole bunch. I'm gonna make it bigger next time.

David: What is it?

Anthony: It's solder. It's melted in a little ball. It's awesome man. 6-1794

The benefit of having previous experience in technical work was evident when I asked students to explain to me what they were doing in the electronics classroom. For example, when students were constructing a hand-held circuit (the "Happy Face") the "experienced" boys said:

Trung: It goes, first - well - the positive goes into the four resistors and the negative goes into the emitter of the transformers - transistors - and then 'cause these plates are separate right, but then these components are combined so the electricity flows through most of them you see. I think if you change the capacity to a higher microflifer right it will make it blink faster or slower. 6-2914

Rick: We're making a circuit. We're learning how resistors, transistors, and collectors work.

LE: How do they work?

Rick: A resistor lowers the voltage for the transistor otherwise the transistor overheats and burns out.

LE: What does a collector do?

Rick: I think it's an alternator that sends a single current from - eh, I'm not too sure actually. 6-1066

These students already had the knowledge and skill required to understand what they were doing in the electronics classroom.

None of the girls exhibited the same enthusiasm for electronics. Nor did girls use the same language or posture the same kind of authority as the "experienced" boys. Of the girls, Jennifer and Lily provided the clearest description of what they were doing:

Jennifer: Solgering or solder - solger or something... I really don't know. These are - I forget. I think they're transistors or something....You have the two and you have electricity, I guess, I don't know really....You just solder a bunch of wires and it makes it work.

LE: How do you think it works?

Jennifer: Electricity goes in and it gets powered by these and it makes the lights go on. It has to go a certain way so the electricity goes. 6-1375

Lily: It shows you how the power moves from one thing to another through the copper. It's the beginning for electric - electronics, I think, just the beginning....The parts of the battery connect to the resistors. These work because the resistor is connected to the wires. The "Happy Face" is connected to the electricity. The wire connects here and through the copper plates and this thing connects to the copper plate so the electricity can travel through. Then it travels through this thing. It travels through here, the battery here. The negative and the positive all flow through the copper plate. 6-1007

The girls used ordinary language to describe what they were doing in the electronics classroom.

At the other extreme were girls and boys who could not follow the teacher's directions and had difficulty describing to me what they were doing:

Tina: It's like a puzzle....It's a "Happy Face."

LE: What is the purpose of making a "Happy Face?"

Tina: I dunno.

Lisa: We're making a "Happy Face," I dunno, a little "Happy Face" and the eyes blink - just making a "Happy Face." 6-934

David: We're making a "Happy Face." Learning to put this stuff together - learning to use this stuff. I dunno. 6-944

Jaspal: I dunno. You put it on the Christmas tree. Make a "Happy Face" and that...I don't know. It just moves something. I don't know. The light goes on and it makes a "Happy Face"....I have to ask Bao what to do. 6-1018

Thus "experienced" students had an advantage in the woodwork and electronics classrooms. They worked quickly and confidently and finished their projects before less experienced students. They were called on to help other students, they did other students' work for them, and they did extra work on the side for the teacher. These students developed confidence and competence in the technical studies classroom, and most of them were boys.

Drafting and graphics relied less on the students' previous gendered experiences in terms of technical skills than other areas. However, gendered experience was still an influential factor in other ways. For example, many of the classroom discussions of design and technology dealt with roads, bridges, tunnels, and space craft - topics that might be described as appealing more to male gendered experiences. Similarly, the teacher tried to motivate the students by giving examples drawn from male gendered experience:

Teacher: So when did the shuttle explode?

David: '86.

Danny: July the something.

David: July 7, 1987.

Rick: We've already established it was '86....

Teacher: I'm going to make the bonus points harder. Not only do you have to find out the day the shuttle exploded. You have to find out the actual flight. How many were there before that? 4-831

Jill: What if you can't think of anything to draw [for a personal logo]? I can't.

Teacher: Well, if you're a star football player draw something about that. If you collect stamps then your logo might include that. 4-2442

Although these examples did not overtly appeal to boys more than girls, the topics fit with what is described in the literature as a masculine approach to design and technology. It is likely that the teachers' talk had less intrinsic appeal to girls.

In addition, some students fell behind in drafting and graphics because they worked slowly and because they completed each task before moving on to the next, as the teacher had told them to do. Most of these students were girls. For example:

[The teacher told students to draw 50 small logos and then to select one logo and enlarge it. Some boys began drawing their large logo before drawing the 50 small ones. When I asked those boys who had skipped ahead, why they had not drawn 50 small logos first, they said-]

Bao: No, I can't think of 50....

Danny: No way!....

Chad: No, I'm going to do more later.

All of the girls did as they were told. For example:

[Poonam was drawing her small logos.]

LE: Have you decided which one you are going to enlarge?

Poonam: No, we have to get 50 first. 4-2997

Jennifer: I've got these drawn, but I've got to do 50 yet. 4-3053

Perhaps because of a lack of confidence, or perhaps because as girls they have learned to do what the teacher says, girls were more likely to do as they were told by the teacher.

Students did have some autonomy in the drafting and graphics section of the program. For example, although all students had to design a magazine cover they could choose the kind of magazine and their own design theme. Upon completion of this assignment it was clear how the students' gendered experiences shaped their work: Rita's magazine cover read "Kids in Daycare!"; other girls designed covers for fashion magazines; and all of the boys designed covers for either car or sport magazines. As well, students were encouraged to enter a "Design a City" competition. Lily was the only student to do this. Her design was bright and colourful with lots of flowers and trees. Students' responses to these kinds of activities, provided a hint of the variety of approaches to technology that might result when students are provided with the challenge to take charge of their own learning.

Like the "experienced" girls in home economics, the "experienced" boys in technical studies told me that they wanted to make something more challenging:

Trung: I thought building that box was a little easy. I wanted to build something better, harder. I wanted to build something to put tapes on. 11-1(29)

Bao: It was too easy. The duck was so easy. It was all mostly done by machine. [The teacher] should have made us do it by hand more. If you do it by hand, there's more skill. If it's all done by machine, it's too easy. I would like to make a bookshelf maybe, but some people are kinda slow. Maybe build that house over there, but that would take too long. 19-4(16)

Trung: We make little "Happy Faces," but those things are too easy. I would like to make a radio, or a transmitter and stuff - the harder kind. The "face" is too easy, you can do that in a day. 11-4(23)

Other students, mostly girls, talked about wanting to make something more creative:

Lily: Maybe we should have some paint and paint the duck then it might be more decorative and make it more interesting. More interesting than just making it. 9-6(1)

Also, some girls talked about wanting to make something more "useful":

Gemma: I wanted to make a rack for my tapes, that way I don't have to buy a holder. 2-2504

Lily: Some of the things aren't really useful. The duck wasn't that really useful and it was a waste of space too. 9-6(5)

Tina: Like for the duck - I don't really know what it was. All I knew the mouth could clip things. Like I put it right beside the phone for messages. I just put the thing like a statue or something. 4-11(37)

These examples show how some students were more sophisticated in their interests than others, and how both girls and boys spoke of wanting to make something other than what they were doing in the classroom.

Girls, more than boys, questioned the purpose of the technical studies program. For example:

Jennifer [to LE]: I don't know how to explain it. [Woodwork] wasn't interesting that's all. It didn't seem like it was very useful, because you can't use those skills. 8-3(30)....I didn't get anything out of [electronics]. I learned how to solder, that's all....All of it's boring 'cause you don't make things that you use....It's not something you'll use in your everyday life. 6-1355

Unlike girls, boys did not question the relevance of what they were doing in technical studies.

The focus of much of the technical studies curriculum was tool skill development. The teacher-directed, product oriented approach appealed to students who already possessed knowledge, skills, and interest in tools and machinery, most of whom were boys. Although drafting and graphics incorporated fewer tool skills than either woodwork or drafting, it too was product oriented and was limiting because of this approach.

Thus the students' previous gendered experiences in domestic and technical work intersected with their classroom experiences and influenced their sense of competency in each area. The girls' sense of competency in domestic work and the boys' sense of competency in technical work maintained their traditional beliefs about who can do domestic and technical work.

Regulation and Positioning

The students' sense of competence in domestic and technical work influenced their responses to the home economics and technical studies program and maintained their beliefs about who can do domestic and technical work. However, their positioning was not straightforward: girls and boys constantly struggled to reassert their gendered positions in domestic and technical work.

For example, some girls regulated the performance of other girls in domestic work. They chastised each other for not performing domestic tasks "correctly":

[The teacher gathered students around to look at each others' muffins.]

Jennifer [to teacher]: Are [the muffins] supposed to be round or pointed on the top?

Teacher: Round.

Jennifer [shouting across the unit]: Tanya, if they're peaked it means you've mixed them too much!

Jill [shouting back, angrily]: We didn't mix them too much! 5-20(3)

Tanya: Okay, let's clean up.

Jill: You can dry; I want to wash. Wash the tray first so you can stack everything on it.

[Tanya washed the tray and put it on the counter.]

Jill: Did you wash the bottom of it as well?

Tanya [glaring at Jill]: Who's doing the washing here?

Jill: I just want to check.

Tanya: How come you used so many dishes?

Jill: I always do. Hey, look at my apron - no spots!

Tanya [looking at her apron]: No spots. We're clean chefs!

[Girls laughed] 5-16(8)

As well as policing each other, girls chastised boys for not performing domestic tasks "correctly":

[Vinh was revving the sewing machine.]

Rita: You nerd. You're gonna break the machine.

[Vinh laughed, but stopped what he was doing.] 3-1694

[Ptan was ironing.]

Tina: Push it! You're waving it around. 3-3663

Lily: Are you going to use the iron?

Ptan: No.

Lily: How come you left it on?

[Ptan carried on sewing.]

Lily: It's on!

[Ptan waved Lily away.] 3-3270

[David and Hung worked in an adjacent unit to Lily, Poonam, and Tina. Although each group worked separately they shared a table for their meal. During the meal-]

Tina [looking over to the boys' pile of dishes]: You shouldn't wait until the last minute to do dishes.

Lily [pointing to the girls' dinner plates]: We only have to clean up these.

[Hung got up from the table and began to wash the dishes. He put the draining rack on the counter without a tray underneath. Water flowed over the boys' books left on the counter.]

David [shouting]: Hey, Hung, use the thing under there, so you don't get water all over the counter. Use the what do you call it, the blue thing. It's underneath!

[David got up from the table to help Hung with the dishes. The girls smiled as they watched the boys doing dishes. David was using a dishcloth to dry dishes.]

Lily: You don't dry dishes with that!

David [angrily]: Well, the other thing's totally soaked.

Poonam: Well, get another one.

David [angrily]: I'm almost done. I'm not stopping now.

[The girls quickly cleaned up their unit. Lily began to help David with the dishes.]

David [firmly]: We don't need your help. It's okay.

[Lily stayed. She wiped the boys' counter and put their dishes in the cupboard. David tipped the water out of the bowl left by Hung and he quickly wiped the counter.]

David: Miss [name of teacher] we're ready!

[Lily quickly dried the boys' sink and polished the taps ready for inspection.] 5-51(23)

[Jill, Tanya, Vinh, and Hung were responsible for washing the teacher's dishes at the end of her demonstration. Jill got up from her seat and began to do the dishes while the teacher was still talking to the class.]

Teacher: Just get them soaking right now.

[Jill continued to wash the dishes.]
 Teacher: You don't have to wash them now. Just leave them and take the notes down.
 [Jill sat down. When the teacher had finished giving notes, she said]
 Teacher: You two boys can be washing the dishes.
 [Jill and Tanya stood by the sink while Vinh washed the dishes. Jill stood behind Vinh, mimicking his movements.]
 Jill [to Tanya]: Oh wow, he's washing.
 [Girls laughed]
 [Hung scrubbed a cookie sheet over the sink Jill had previously filled with rinse water.]
 Jill: Oh, the water's yellow! It's supposed to be white!
 Tina: Maybe, they're fixing it or something.
 Jill [angrily]: No, they've put the cookie sheet in the water. Now all the dishes are going to be sticky!
 Teacher: Would someone wash off my table please?
 [Jill immediately fetched a clean cloth from the hamper. Rather than go to the boys' sink to wet the cloth, she went to her own sink. Tanya followed Jill to the sink.]
 Tanya [angrily]: That's right, get the other sink wet! Are you going to dry the sink as well?
 [Jill wet the cloth without speaking. Tanya dried the sink. After cleaning the teacher's table, Jill and Tanya dried the teacher's dishes and put them away in the cupboards. Hung and Chau returned to their seats, leaving the dishpan and water in the sink.]
 Jill [shouting]: You guys didn't finish! You guys didn't sweep the floor!
 Teacher: It's alright, it's okay.
 [Bell rang. Students left for lunch, leaving Jill and Tanya.]
 Tanya: I'll go, okay? I have to buy a ticket, okay?
 Jill: Okay.
 [Before leaving, Jill cleaned and dried the dishpan and the sink, washed and dried the counter, and put the wet cloths in the hamper.] 5-23(41)

While the girls' confidence with domestic tasks gave them an advantage over boys and over each other, their busyness and attention to cleanliness tied them to a domestic femininity. The girls' correcting of boys and other girls in the domestic setting, and cleaning up after boys, while giving power to girls, reinforced the notion that women are better

suited at domestic work than men. The girls' behaviour had the effect of emphasizing their own domesticity while subverting it in boys. The latter example also shows how the teacher tried to purposefully include boys and girls in clean-up duties, but the girls exerted their authority and took control.

There were, however, limits to the girls' domesticity as the following incidents show:

Jennifer [sewing]: Mine has a hole in the end. What do I do with it?

Maria [laughing]: Forget it, just keep sewing. 3-2678

Jill [machine sewing]: My thread's stuck.

Tanya: What happened?

Jill: It [the needle] didn't go in the center.

Tanya: Are you going to do it over?

Jill: No way, just cut it off. 3-5037

[The teacher checked Jennifer's and Maria's unit]

Teacher [to Jennifer]: Okay, where's your board and your pizza pan?

[Jennifer took a baking sheet out of the cupboard.]

Teacher: That's not your pizza pan.

Jennifer: This is our pan!

Teacher [pointing to the board]: There is still dough on there. Look, take a scraper.

[Maria took a scraper and cleaned the board.]

Teacher [looking in a drawer]: That shouldn't be there. What are these chopsticks doing here? Chopsticks should be back in my unit.

Jennifer [firmly]: I don't know. They're not ours.

Teacher: Things are in an awful mess.

Jennifer: All we used today was this.

Teacher: I'm not saying it's your fault. Chairs up please.

[The bell rang. Maria and Jennifer ran out of the door.] 5-67(8)

The boys also regulated each other in the domestic setting. Occasionally, the boys corrected themselves and each other while sewing and cleaning-up:

Vinh [sewing]: The corner's crooked so I'm taking all the stuff out. 3-2637

Danny [machine sewing]: I'm going slow. It's the only way. I want to get it perfect. 3-961

David: You don't need to iron [the kite] again.

Danny: I got it wrinkled. 3-3746

[David started to leave for lunch, while Jaspal was washing dishes.]

Jaspal: Hey man, come back here.

David [returning to the unit]: Shit all this! 5-60(12)

[Students had cleaned up ready to leave. Jaspal took a glass from the cupboard.]

Danny: What you doing, Jaspal?

Jaspal: Getting a drink of water.

Danny: Well, make sure you wash the cup then. 5-59(17)

But, more often boys corrected other boys' performance when they were becoming "too domestic." This was most noticeable in the boys' response to Bao's ability in sewing:

Danny: Bao would make a good sewing teacher.

David: Yes, Bao. You don't have to be smart. You just have to be good. 3-4230

Stuart: Bao, you're good at [sewing].

Danny: He's good at everything.

Stuart [laughing]: Well, not English.

Danny [laughing]: Well, the easy stuff. He's good if he doesn't have to use his brain. If he has to think for a second he gets put out of class.

Bao: You get English and I get to walk around.

[Boys laughed] 3-57(1)

Although Bao usually worked with, and was accepted by, this group of boys, his ability in sewing clearly caused some concern. The boys attempted to regulate Bao's behaviour through humour. As well, the boys' comments reflect their low estimation of the intelligence required for sewing, and of people who sew.

In technical studies, girls emphasized their inadequacies and boys emphasized their authority in technical work. For example, while some girls, like Lily and Jill, consistently demonstrated their competence in technical work, other girls emphasized their own incompetence. Some girls played "helpless" with other girls:

Rita [using scroll saw]: Oh, it's vibrating and everything.
 Maria: When it does that just pull it out slowly.
 Rita [trying again]: This is really freaking me out.
 2-1253

[Maria finished sanding her box on the electric sander.]
 Rita [Holding her box to Maria; childish voice]: Please, please!
 [Maria sanded Rita's box.] 2-2527

And some girls played "helpless" with boys:

[Tina was cutting her wire with pliers. David sat next to her.]
 Tina: I'm not strong you know that.
 David: You don't need to be strong. Your "eyes" [lights on "Happy Face"] are too far out that's all. One way you can fix it is by vacuuming it out. The other way is to push it through.
 Tina: Okay, you push it.
 [David obliged]
 Tina: You're pushing it up. Push it sideways.
 David: I'm not used to this. I had Rick help me.
 Tina: Okay, okay, that's okay. Stop!
 David: Okay? It better be.
 Tina: Expert. 6-4076

Tina knew what to do, but asked David to do her work. David declared his own lack of experience in electronics and challenged Tina's gendered notions about needing strength to do technical work. However, Tina tried to reinforce the

very "masculine" traits that disadvantage women: she named David as "expert" in technical work.

Still other girls moved back and forth between demonstrations of competence and helplessness. For example, Jennifer usually worked with confidence in the woodwork classroom:

Jennifer measured her piece of wood. She marked it with a pencil, put it in the vice and started to plane. She worked very confidently. 2-916

She, occasionally, helped other girls:

Jennifer [to Maria]: You didn't use your pliers to clip it. Go like this over it and then put your wires on. [Jennifer dropped solder on each nail head for Maria. Maria held the solder while Jennifer held the gun]. 6-2799

And she forcefully demonstrated her competence with hand and power-tools in front of boys:

[Jennifer was screwing Vinh's box for him]
Vinh [to me]: It's woman's work isn't it. It is isn't it? 2-3258

Jennifer: We need power.
Anthony: Use your brain.
[Jennifer started the drill. The noise alerted Rick.]
Rick [sarcastically]: Yes, Jennifer.
Jennifer: Oh shut up! 6-1174

[Jennifer removed the cassette from the typesetting machine]
Jay: Do you know what to do Jennifer? The clamp has to be shut. You go like this [showing her what to do].
Jennifer: I know what to do.
Jay: She doesn't know what to do.
David: Yes, Jay, go help her. 4-3261

[After printing, the logos had to be put through a waxing machine. Danny was about to take Jennifer's logo from her.]
Danny: Give it to me, Jennifer.
Jennifer: Let me do it.
Jay: You'll screw up!

Jennifer: Oh shut up!
[Jennifer used the machine herself.] 4-3614

But at other times she assumed a position that illustrated her incompetence in technical work:

[Although Jennifer had previously soldered parts of her "Happy Face" herself:]
Jennifer [childish voice]: Hey, Bao will you do mine?....Bao will you do mine. Just solder it for me. I'm scared I'm not gonna do it right. [Bao did it for her] 6-2840

While Jennifer provided the most challenge to boys' devaluation of girls she also played helpless around boys. In so doing, she gave the boys an opportunity to demonstrate traditional masculine traits of strength and dominance and confined herself to a position of powerlessness in technical work.

Thus, while some girls challenged notions of girls' weakness and ineptitude in technical work, others reinforced this kind of femininity. And, even while challenging boys' definition of them, some girls worked at producing a femininity, and indirectly a masculinity for boys, that contributes to women's disadvantage.

Most boys postured authority and competence in the technical studies classroom. For example in the woodwork classroom, the teacher whistled as he worked; so did the boys. The teacher threw scraps of wood noisily into a garbage can; so did the boys. The teacher blew sawdust on students; so did the boys. The teacher worked on projects at the side of the room; boys watched him intently and were

ready to help when required. The teacher carried his projects high around the room; so did the boys. In electronics and drafting, the boys displayed their knowledge about electronic equipment, particularly computers, and in all the areas the boys dominated equipment and machinery. The following scene is typical of most boys' behaviour at the beginning of a technical studies class:

[The boys were playing with tools at their benches, waiting for the teacher to start. The noise level was high as the boys banged and moved the tools about. All of the girls were sitting on the benches talking to each other. None of the girls were handling tools....]
 Teacher: Just put the tools down! Keep things out of your hands now. It's hard for me to hear when you are banging things. 2-577

Authority with tools and equipment was something that most boys tried to show:

As the teacher read the daily bulletin, Rick "eyed" his piece of wood to see if it was straight. 2-340

David [picking up a chisel]: This one's chipped. It's worth nothing.
 Stuart: This one's sharp. Look at this one.
 David [running his finger over the chisel edge]: It's sharp. 2-530

Whereas nervousness at the machines was something that most boys tried to hide:

[Danny was the first to use the table saw.]
 Danny: I did it fast guys. 2-1725

Trung was using the rotary saw. He stood back from the machine as he sawed. Vinh was next. He put his sweater over his hand as he sawed. 2-1785

[I asked Jaspal why he had given up sawing his piece of wood.]
 Jaspal: It wouldn't work.
 Ptan: He was scared.
 Jaspal: It wouldn't work! 2-1098

More importantly the boys worked at producing girls' incompetence, and thereby their own competence, in technical work. For example, the "experienced" boys frequently ridiculed the girls' work:

Bao [to Gemma]: Where's your wood? You haven't even got that yet. 2-3028

Maria began to use the scroll saw. Stuart made a squeaky noise [as if to suggest that Maria was scared]. Maria jumped and as she did so the blade broke. 2-1085

[Lily was using the band saw. Vinh leaned on the saw. Ray, Ptan, and Jay were all very close to Lily, crowding her.]

Vinh: Look, she's made an extra cut for nothing.

Ray: You made an extra line for nothing.

[Lily did not speak. She finished sawing and moved away.] 2-1234

As well, some of the boys took control of the girls' work and did it for them:

Bao [picking up Jennifer's plastic cover for her pencil box]: It's not even. Where's your box?

[Jennifer did not respond.]

Bao: Where's your box? Where's your box?

[Jennifer gave her box to Bao.]

Bao: It's not even.

[Bao put Jennifer's box in the vice. He drilled holes and refixed the screws. Bao had screwed the plastic to the wood for which Jennifer had already drilled holes. Consequently the piece now had two holes showing - those Jennifer had already drilled. Jennifer pointed to the two extra holes that were now showing.]

Bao: You should have showed me [that you had already drilled them] before! 2-3073

This example shows how Bao constructed Jennifer's incompetence by pointing out the "imperfections" in her work. Bao also blamed Jennifer for his own mistake. Again, Jennifer, who often challenged the boys' authority, complied with Bao's demands.

When the teacher asked girls and less competent boys to work together, these boys also produced girls' incompetence, and consequently their own competence, in technical work. For example the teacher asked Poonam to work with Jaspal and Vinh:

[Poonam, Jaspal, and Vinh were to place their pieces of copper in a container which could hold up to four pieces of copper. The container was then immersed in acid.]

Teacher: Okay, who's going to be boss?

Jaspal: I'll be boss.

Teacher: Well, if you're going to be boss, take your jacket off.

Poonam: You have to have gloves and an apron on.

Jaspal: Oh, yes.

[Jaspal put on the gloves. Poonam tied his apron strings. Jaspal opened the tank and put his piece of copper in place.]

Vinh [to Poonam]: Here [meaning to give her piece of copper to him].

[Poonam handed her piece of copper to Vinh who handed it to Jaspal. Jaspal put the pieces in the acid bath. Poonam watched carefully.]

Poonam: It has to be down.

Jaspal: Oh, yeah. There's a hole in it!

Poonam: A hole in it. [She laughed at Jaspal because he did not know that the gap was not important.]

Jaspal [to teacher]: There's a hole in it.

Teacher: It doesn't matter. What are you trying to do?

Jaspal: Aren't we supposed to put in four?

Poonam: No!

Jaspal: Yes. He said put in 4.

Poonam: But there isn't anybody else!

Jaspal: But don't we have to put in 4?

Poonam: But there's nobody else!

Vinh: Come on Jaspal, think.

Jaspal: Well, what do we do?

Poonam: Put in 3!

Jaspal: Hope it doesn't fall out.

[Poonam laughed and walked away.] 6-1663

When the teacher asked a mixed-sex group to choose a leader, a boy took charge. This happened even though Jaspal did not have a clear understanding of how to use the equipment.

Also, Poonam's comments to Jaspal, about how to dress safely, though providing her with an opportunity to assert her power in the group, associated her with "mothering" or "wifery" and ultimately domesticity.

In electronics, the teacher sometimes specifically assigned boys to help girls. While developing the boys' competence, this approach had the effect of further portraying the girls' incompetence in technical work:

[Ptan "helped" Jill and Lily]
 Ptan [examining Jill's block of nails]: There's something wrong. Oh, it's over here. I need pliers.
 [Jill handed Ptan a pair of pliers]
 Ptan: Is [the solder gun] hot yet?
 Jill: No.
 Ptan: It should be.
 [Ptan stripped Jill's wires for her, ready to solder them on the block of wood.]
 Ptan: Get some water.
 [Jill fetched paper towel and dripped water onto the sponge ready to solder.]
 Ptan: Lily you know you're supposed to take it out in one piece?
 Lily: It's so rusty I can't.
 Ptan: "Rusty" - what a word! Here Lily use these.
 [Ptan handed Lily a small pair of pliers.]
 Lily [holding up a large pair of pliers]: I'm going to use these.
 Ptan: But you're supposed to use these [small pair].
 Jill: You're organizing are you?
 Ptan: The power's not even on!
 Jill: It was, I turned them all on!
 Ptan: You didn't turn it on properly!
 Jill: I did. I've always gotten power like this.
 Ptan [flicking the switches]: It's on now, [checking the metre] the metre's on.
 Jill: You have to hold the wire, right?
 Ptan: What wire? The solder? You've tinned it already, right?
 Jill: What do you mean?
 Ptan: On the tops. Go ahead.
 [Ptan held the wire and the solder in place while Jill held the solder gun.]
 Jill: Boy, it stinks.
 Ptan: Here. I'll do it.

[Ptan finished soldering for Jill, while she watched.]
 Jill: Do I add more solder?
 Ptan: No, go and show [the teacher] now....Go show him
I'll start the "Happy Face"....
 Lily [cleaning her "Happy Face"]: How come it's so
 rusty. Will it still work?
 [Ptan took Lily's "Happy Face" from her.]
 Lily: It's like it's stuck.
 Ptan: You should have cleaned it before.
 Lily: I did. It got rusty over the weekend.
 [Ptan began to wire Lily's "Happy Face." She already
 had inserted some of the wire herself.]
 Lily: Don't put it in the wrong way.
 Ptan: I know.
 [Ptan put the wire in for Lily]
 Lily: You need to clean your glasses. Hurry.
 Ptan: What's the rush Lily?
 Lily: I need to do other things.
 Ptan: You can solder it now.
 Lily: You hold it. I'll do it. [Lily soldered]
 Ptan: It's burning me. This thing is hot man.
 Lily: What's hot? The solder?
 Ptan: What do you think? Yes.
 Lily: I never knew that....
 Ptan: Are you blind Lily. Do that one. Oh Lily!
 Lily: What did I do wrong?
 Ptan: Only kidding. Oh, Lily had a heart attack.
 [Lily soldered]
 Lily: I never knew it was so hot. It's burning me.
 Ptan: Lily you're not helping, put it down.
 Lily: You're burning the thing. If anything goes wrong
 it's your fault. What if it doesn't work?
 Ptan: If it doesn't work, it doesn't work. Well. let's
 see. This is the moment. [Ptan clipped a battery to
 the "Happy Face." It lit up.] Of course it works.
 Why wouldn't it work?
 Lily: Thanks. You're such a good helper. 6-4076

Ptan not only took over and did the work for Lily, but he also ordered Lily to fetch equipment for him. As well, he chastised Lily for not doing her previous work correctly, for not knowing particular skills, and for not understanding or using the "correct" language. In addition, he indicated that Lily was fussing and over-reacting. Lily challenged Ptan's authority by telling him what to do, but her

chastising of Ptan for having dirty glasses, and for praising his expertise, tied her to traditional notions of femininity.

Girls could do the work themselves, as the following incident shows:

[Gemma's box was ready to go in the vice. Bao took Gemma's box and put it in the vice for her. The bell rang. Gemma took her box out of the vice:]
Teacher: Leave it in the vice if it is glued!
[Gemma quickly replaced the box in the vice herself.]
2-1969

Summary

This chapter has explored the relationship between students' previous gendered experiences, their beliefs about domestic and technical work, and their experiences in home economics and technical studies classrooms. The chapter has shown the complexity of students' developing sense of competence in domestic and technical work, and raises questions about the need for a more gender and culture sensitive curriculum.

Because of the ways domestic and technical work is organized in their lives, students brought to the classroom different experiences and interests in domestic and technical work. Girls' and boys' gendered sense of their competence in each area was heightened by their self-selection into same-sex groups in the home economics and technical studies classrooms.

Although the students assumed various positions in relation to domestic and technical work, a pattern was established where students acted in what they saw as gender appropriate ways. While interaction was complex, girls and boys emphasized girls' authority in domestic work and minimized girls' expertise in technical work, and emphasized boys' authority in technical work and minimized boys' expertise in domestic work. Overall, the students' supported traditional stereotypes about who can do domestic and technical work.

The students' gendered sense of competence was reinforced through the curriculum and classroom pedagogy. Because the curriculum was defined around specific competencies, defined in gendered, Western, middle-class terms, the students' classroom experiences confirmed rather than challenged their sense of competence in these areas. The teachers' definition of correct techniques and control of the curriculum was designed for efficiency, but left no place for the personal knowledge and experiences of students. The curriculum was not attuned to the students' interests and did not take into account their gendered experiences. As a result, gender differences played themselves out through the curriculum.

The students' gendered sense of competence in domestic and technical work was not recognized overtly by the teachers. While all students participated in the program

and learned some domestic or technical skills that were new to them, students spoke to the necessity for a more gender-sensitive curriculum and the importance of allowing for different competencies. Students, particularly girls, voiced their interests in different ways of knowing, thereby emphasizing the importance of variety in classroom experiences.

CHAPTER 5

SOCIAL RELATIONS OF THE CLASSROOM

This chapter examines how the social relations of the classroom contribute to the production of students' gender identities. The chapter is organized in four sections: a) best-friendships and group formation, b) domination and harassment, c) heterosexual relationships and prohibitions against homosexuality, and d) the body and popular culture. Although I discuss each separately, they are interconnected and act together to construct traditional power relations and ultimately gender inequality.

Best Friendships and Group Formation

As noted in the previous chapter, in all sections, unless otherwise directed by the teacher, students segregated themselves into same-sex groups. Students actively sought the company of their own sex:

[Tina was soldering while Poonam watched. Poonam moved away]:

Tina: Oh, Poonam stay with me here.

Poonam: I got to do my assignment.

Tina: You sit here and do it.

Poonam: I can't....

Tina: You stay. You stay Poonam.

Poonam: I have to go to finish my assignment.

Tina: No, stay with me. Don't go Poonam. You have to stay girl. 6-4026

Teacher: Okay, let's go [to the work stations].

Jay: Let's go, Ray.

Ray: Where do we have to go?

Jay: We go over there. 6-909

[Danny was absent when groups were chosen. The next day:]

Danny [to Bao]: Are you Jaspal's partner?

Bao: Yes.

Danny: How come? You're my partner. 6-662

Girls and boys gave similar reasons for this segregation. They said they were "more comfortable," "more confident," and "less embarrassed" with people of the same sex, and most of all, they wanted to be with their friends. A friend was someone they could talk to and relate to, and was also of the same sex:

Rita: Girls like to be near each other so we can talk to each other. Girls don't talk to boys 'cause they don't understand. Girls don't like to talk to guys....We talk about clothes, shopping, girls' talk, stuff like that. 6-4(12)

Jaspal: Boys talk to each other more. They share things with each other....Like what we talk about is what we do together. We don't know what girls talk about so we don't talk to them. 13-3(1)

Some girls and boys gave other reasons for their desire to work separately. Jill and Tanya had already internalized messages of girls' promiscuity:

Jill: Like if you sit with the guys the girls would say "You're boy-crazy" and all those things. 3-25(20)

Tanya: We don't want boys to think we like them...don't want to give them ideas. 1-6(50)

Melanie spoke of the power boys held in the classroom:

We just go in the room and we know we shouldn't sit there 'cause the boys sit there. 11-5(5)

Some boys said that boys were uncomfortable in the presence of girls:

Ptan: I think [boys] are scared of the girls, somehow. Because they want to sit on their own side and be kind

of King and this is the Queen's side over there, I think so. 20-8(8)

David: I guess they feel more confident with their friends, not as nervous. 16-1(34)

A few boys said that they did not like the girls:

Stuart: We don't like [the girls]. We just don't. We stay with our friends. 12-1(48)

David: I really dislike Rita. She just bugs me. I don't know why, but she just bugs me. It's hard to explain, but she just gets to me. I don't want to work with her at all. 16-3(39)

Whereas Danny said that he did like the girls in the classroom:

Danny: Gemma should have stayed though. Gemma was nice. She was funny....She smiled like a little baby. Well, she's not a baby. It's just that she smiled like a baby. She had cheeks and all that. Jennifer, Lily, all those. I guess the girls are nice. 10-2(46)

Danny's description of things he liked about Gemma tie him to a masculinity that values "little girl" characteristics in women.

Antagonistic gender relations were noticeable when girls and boys were required to work together. In interviews, girls and boys spoke negatively about these experiences:

Jill: I was writing and doing most of the work while [the boys] were talking about games and TV and shows and stuff. 3-26(20)

Rita: Last week it was me and Tina and John and Hung. John and Hung just sat there and didn't do anything, and me and Tina did all the work. And in my group before that me and Jennifer did all the work, it was David, me, Jennifer, and John. 5-41(3)

David: I didn't want to work with [Rita] at all. Then the teacher started getting really mad and said 'If you

don't work with her I'll go to [name of principal]'s office right now.' So I said I'll work with her. But [the girls] kept saying 'Oh, we did all the work' and stuff. I didn't do lots, but I did my fair share. Rita was the recorder so that didn't help much.
1-3(38)

As well, I noticed a back and forth bantering between the dominant girls and boys. Some of the boys commented on this in the following ways:

LE: Sometimes the boys make fun of the girls.
Vinh: Make these jokes or something - yeah, make jokes. [laughed] Jokes about what they like maybe, or whatever. That kind of stuff.
LE: Do girls ever make fun of the boys?
Vinh: Yes. Yeah, probably. I guess so. They say someone who you like and just joke about it, or something.
LE: You tease each other about who you like?
Vinh: Yeah, Yeah. [laughed] 14-7(23)

Danny: Most of the time when I'm finished my work I'll go talk to Jennifer, go bug them or something. Something to keep me busy.
LE: How do you 'bug' the girls?
Danny: Well, maybe before the class the girls will bug the boys and then before the class ends he'll bug her and it will go on all through the day, I guess.
10-2(46)

While girls and boys seemingly preferred same-sex friendships, these friendships were also exclusive. Some girls noticed when another girl was left out of a group:

Jill: Hey, Lily do you want to work together or separate? 6-1561

Maria: Hey, Jennifer we're over here. 6-920

But, at other times the girls separated themselves and excluded those with less power:

Jill: If you sit with girls you don't even know, like they don't act that friendly with you. 3-25(20)

[Poonam and Tina were walking out of the room at lunchtime]

Lily: Where you guys going?

[Poonam shrugged her shoulders, but kept going] 6-1911

[Maria, Melanie, and Rita were trying to find out why Tanya, a new student, had transferred to their school. Tanya had brought her home economics binder with her from her previous school.]

Maria: Can I look through your binder?

Tanya: Sure.

[Maria and Rita looked through the binder, whispering behind Tanya's back.]

Rita [to Tanya]: You're from [name of school]?

Tanya: Yeah.

Rita: You're sure you're not from [name of another school]?

Melanie: Do you know the counsellor at [name of school]? Does he have dark hair and a moustache?

[Tanya did not respond]

Rita [quietly to Maria]: She says she's from [name of school], but she isn't. [Out of Tanya's view, but facing Maria and Melanie, Rita mouthed] She's - not - from - [name of school].

[Maria, Melanie, and Rita stood together around the ironing board, whispering and looking across at Tanya. The girls returned to their sewing machines and sat silently, sewing. The bell rang. Maria, Rita, and Melanie ran out together, leaving Tanya on her own.]
3-23(6)

Girls' friendships also changed over time:

Maria: Jill and Tina don't like each other.

Tanya: They don't?

Maria: No. Jill doesn't like Tina.

Tanya: Does Tina like Jill?

Maria: I don't know. They have fights one day and then - I don't know she has an attitude problem.

Tanya: I'm not really friends with her either.

1-27(35)

Maria: I used to never speak to Jennifer 'cause she used to be such a snob and everything, but she really is nice now.

LE: What do you mean snob?

Maria: They won't talk to you. You say 'Hi' to them and they just like walk away.

Tina: Now we are really good friends - we share cubby holes. 1-29(15)

Rita: Me and Jennifer had a big fight one time....She got really mad and she said 'God, you're a snob.' I said 'I'm not a snob, you're a bitch.' So we started fighting....We're friends now, though. 6-9(27)

Boys' friendships were equally exclusive:

Stuart: Hey, what's Ptan doing sitting at our table?
6-1634

Bao: Anthony doesn't like talking. He just sits there. In every subject he doesn't want to talk. He just sits there. He doesn't seem to want to talk and I don't want to try. 19-6(3)

Teacher [to Hung]: Where's your partner?

Hung: I don't have one.

Teacher: Well, how did this happen? Come here will you.

[The teacher moved over to David and Rick. He asked if Hung could work with them.]

David: I'm always stuck with the guy.

Teacher: You must be joking. This is terrible.

David: No. I'm always stuck with him.

Teacher: Well, he told me you were his best friend. This is terrible. [The teacher left Hung with David and Rick.]

David: Who told you to come here?

Hung: Teacher did.

David: Go away Hung, we don't want you here. 6-404

David, previously, had readily worked with Hung. But, when David had the opportunity to be with Rick, he did not wish to associate with, or be associated with, Hung. The teacher was not attuned to the complexity of power relations among the boys.

The antagonisms of gender were further complicated by the formation of groups across gender boundaries. In interviews, I tried to find out more about group formation and identity:

Rita: Well, really popular people make fun of other popular people - the guys and the girls. Or the really popular people make fun of the nerdy people. Like

Danny is popular with the guys and Jennifer is popular with the girls, so they'll be talking back and forth. And there'll be somebody like Stuart and somebody like Maria who put each other down.

LE: Why do they do that?

Rita: I don't know. Just different types of people, you know. Stuart is more like a macho-type person, you know, thinks he's great. He would put Maria down because she is a shy type. She wouldn't really talk back that much. So a real macho person would put down a shy person. 6-1(51)

According to Rita there are two different groups, one comprised of "popular" people and the other of "shy" people. Popular people put down shy people, not because of gender but because of the type of people they are. Rita also talked about the power held by popular people:

Rita: Popular guys and girls will put down shy guys and girls. The shy people won't put down the popular people. They won't 'cause they are already shy. So if a shy person says 'That's ugly' to a popular person, they will say 'Oh yeah' and they will get everyone to say yours is ugly, 'cause they've got the power, you know.

LE: Where does the power come from. How does it start?

Rita: I don't know. At the beginning of the year, people make groups and it carries on throughout the year....They all hang around together. Just all different groups. You sort of stick by the group you know....Really popular people are also snobby, you know. They control the people in the school, you know. If they say to somebody will you go and get this they will go and get it for them...everybody obeys them because they want to be popular. 6-2(21)

Likewise, David talked to me about popular people:

David: Stuart started getting really popular in school, right, and he took off with these guys. 'Cause I'm just your average Joe. He became really popular with the popular guys.

LE: What do you mean 'popular'?

David: You just become popular. You get there somehow. There's no actual way to get there, you just get there and you hang out with the popular people and stuff like that....Stuart thinks he's the best all the time. He thinks he can do whatever he wants. Even though he is

quite smart. He is very, very smart, and he's a good athlete too. 16-5(28)

David's comments suggest that he is critical of the system that creates popular people. At the same time, he participated in the process of creating popular people through his adoration of Stuart.

The notion of being "popular" was clearly important to group formation. Being popular required that others were "shy" or "nerdy." Being popular also had something to do with the body and its presentation, which in turn had to do with wealth:

LE: What do you mean by 'popular'?

Rita: I don't know. Everybody likes you in the school. You dress really nice. Everybody talks to you. All the guys talk to you and all the girls talk to you. It has a lot to do with what you look like. If you're pretty and dress nice, and have nice clothes. 6-3(6)

David: [Popular boys] have got really nice shoes and stuff, but I don't care much. I got some 'Nikes' - just some basketball shoes.

LE: What's a really nice shoe?

David: Well, they get a lot of shoes. They get 'Nike Airstab,' they're good, and 'Brooks Hydroflow,' and stuff, they are really nice ones. They usually have the air bubble here down the side of the shoe, so you can see the air. Like 'Nike Airmax' and stuff, they are really good shoes. Like when you walk it like springs you up. It has an air bubble and it pushes you up when you run. It helps for more speed - more distance and things. Ashton's got a pair. 17-6(23)

Here there is an interesting comparison between Rita's and David's comments. Both identify clothing as being something that identifies a person as popular. Rita, speaks about girls looking "pretty" and "nice," whereas David talks about boys' clothing that gives the illusion of being tall and

moving fast. What defines a person as "popular" is gendered.

Students' segregating themselves into same-sex groups and hierarchies among and between girls and boys, illustrate the complexity of interaction within and across gender categories. The organization of best friendships and group formation provided a context for other kinds of classroom interaction.

Domination and Harassment

Many studies have shown that male students dominate classroom interaction. This study is no exception. Here I describe how male dominance was produced through verbal harassment, silencing, and battering, and I go further to explore the subjectivities and complexities of the classroom.

Verbal Harassment

In interviews girls described boys as "immature" and said they were constantly "making fun" of girls. Although the girls did not speak about what boys actually said to them, I observed that a group of boys called girls "cows," "bitches," "witches," "whores," "dogs," "hussies," and "lezzies," and they said they were "evil" and they "smelled." For example:

Rick [to Ptan about Tina]: Does she smell? I asked you to move up, but you wouldn't - so I say does she smell?
1-1229

Teacher [reviewing parts of the sewing machine]: This is the presser foot lever. [What is] the next one?

Rita: Feed-dogs.

Stuart: Rita-dogs! 3-508

[Jay, Rick, Stuart, and Danny were looking at each other's magazine covers]

Rick [shouting]: Jennifer the first nun to be on the cover of 'Playboy.' 'Jennifer the Nun - Feature Story.'

Jennifer [smiling]: Rick, you're being mean.

Rick: What a hussie eh? 4-2127

[The woodwork teacher told Maria to tell students to move into the varnish room. Maria asked Rita to do this for her.]

Rita [loudly]: Everybody is supposed to go in the varnish room.

[Rita went into the varnish room. She came out and shouted again:]

Rita: Everybody is supposed to go in the varnish room.

Danny: Stupid cow. 2-3128

[In woodwork Ptan and Jill talked quietly together.]

Stuart [loudly to Ptan]: Don't talk to that cow.

[Ptan looked back over his shoulder at Stuart. He continued talking quietly to Jill.] 2-2701

The same group of boys frequently referred to girls and women as objects:

Teacher [answering the telephone]: Is there a Jane or a Lulu here?

David: Whose Lulu?

Rick: Big one. Chinese. 3-797

Teacher: What is important in other people?

Bao: Good looking....

David: What about behaviour?

Rick: No-one wants an ugly. 1-103

And they made comments about parts of women's bodies:

Ray [about Rita]: Her arse is so fat. 1-2042

Jay [looking through a fashion magazine]: Wow. Look at those cheeks! 3-44(41)

Rick: Well, at least she's a virgin.

Stuart: How do you know? 3-34(6)

As well, the boys' comments suggested an intense hatred for the most outspoken girls in the classroom:

Rita: Bye Miss [name of teacher] - don't forget to buy something at the bake sale.

Danny: Oh, shut up. I hate her man. I just hate her.
3-3920

The boys' talk was often homophobic:

Rick: She's gay, man. That's her game.

Jay: Yeah, that's her game. 4-1415

and racist:

[The teacher was taking attendance.]

Tanya: Did you call Tanya?

Jay: She's the brown one.

[Laughter] 6-112

Bao [to Gemma]: Take this one [piece of yellow plastic].

Danny: Yellow would look good with your complexion.
2-2445

and was often linked to their sexuality:

Teacher: Orange vegetables have lots of vitamin A.

Jay [pretending to be serious]: Is it hard?

Teacher: The carrot is crisp. Would someone like to have it?

Danny: Jennifer will have it. She likes long things.

[Laughter] 5-44(52)

The boys' misogynist talk was also directed at woman teachers.

Stuart [about a teacher]: She's a witchdoctor. She's a cow. 3-61(10)

Jay: Hey, Miss whatever your name is - come here!
3-222

And they likened man teachers they did not like, to women:

[I asked Stuart if he had taken woodwork in elementary school.]

Stuart: Yes, but I hated it. We had Mrs [name of teacher].

LE: You had a woman teacher?

[Jay and Stuart laughed.]
 Stuart: Yes, we had Mrs [name of teacher].
 LE: Why is that funny?
 Stuart: Well, he was a right goof.
 LE: Your teacher was a man?
 Stuart: Yes - a goof. 2-538

Occasionally, girls' comments about women were similar to those of the boys:

Tanya: My teacher at [name of school] was a b.i.t.c.h. You couldn't ask her anything. What's this one like?
 3-20(49)

[Showing Tanya her drawing of a clock face, marked by the teacher]
 Jill: This is all I did to my clock.
 Tanya: You sent it in late and you got an "8"! Stupid cow. 4-2181

The dominant boys also verbally harassed less powerful boys. They controlled their access to resources:

[Hung was using a sewing machine. Rick was ready to use a machine. He stood over Hung as if expecting him to move.]
 Rick: Okay, Hung, you get to go with Trung now. You go share with Trung.
 [Hung moved back to a table. When Rick had finished using the machine he moved to a table. Hung went back to the sewing machine.]
 Rick: Isn't Trung finished yet?
 Hung: No.
 [Rick moved back to the machine. He did not say anything to Hung. Hung moved to a table.] 3-976

And they ridiculed Ptan and Hung. The dominant boys' comments about Ptan usually related to his height:

Stuart [shouting]: Eenie, meenie, miney Ptan. 4-2704
 Rick: Hey, Ptan, stop chewing, man. It'll stunt your growth.
 Stuart: What growth?
 [Boys laughed, including Ptan]
 Rick: I swallow mine. 4-3186

Teacher [taking attendance]: Ptan?
 Rick: He'll be sitting in the front.

David: He has to sit in the front so he can see.

Rick: Otherwise he'd be like this [Rick put his chin on his desk. Rick and David laughed.] 6-19

The dominant boys' comments about Hung usually referred to his speech and to his capabilities:

[The ironing board had collapsed. Hung was trying to fix it]

Danny [shouting]: Hung iron. Hung, bang, bang.

Rick: Good move, Hung. You've got to be crazy, man. 3-42(32)

[Rick was ironing]

Rick: Oh, the smell! Smells like Hung.

[Hung sat silently sewing.] 3-42(34)

Jay [laughing]: The Hung club. Hung watch it. Part of the Ptan Ptan club.

Danny: Yeah, the Geek club.

David: Yeah, I tried to get in, but I wasn't retarded enough.

Thang: Hey Hung, did you take my pins? You made all my pins fall in here.

Jay: Hung talking funny. Hung, Hung.

David: Hey, shut up Hung.

[Jay, David, and Danny laughed. Hung did not respond.] 3-4316

In this latter example, David, while not usually a dominant boy, participated in the verbal harassment of Hung. David thus supported the domination of less powerful boys, even though he was usually one of them.

The dominant boys, however, quickly came to Hung's defence when he was criticized by a substitute teacher:

[Hung was sewing his pincushion]

Teacher: May I see your kite? Aren't you supposed to be working on your kite. Let me see it.

[Hung did not respond]

Rick [to teacher]: You're supposed to finish the pincushion first.

Stuart [to teacher]: She told him. He's doing what she said. 3-3253

Although there were divisions among boys, they presented a united front when challenged by a woman teacher.

The dominant boys also used name-calling to produce a kind of group camaraderie:

Danny [looking at Bao's binder]: Bao, are these your names - 'Geek,' 'Goof,' 'Gan,' 'Geek'?

[Boys laughed]

Bao: He's a gay low.

Stuart: Danny's not a 'gay low,' he's a 'fag.'

Danny: I don't care, call me anything.

Stuart: I called you a hooker.

Danny: I thought you were a pimp.

Stuart: Well I don't get much money.

Bao: Yeah, 15 for me and 50 for you, that's stupid.

Stuart: Yeah, God damn it.

[Boys laughed] 4-2765

Thus, as well as using sexist, racist, and homophobic comments to exclude girls and less powerful boys, dominant boys used name calling as a form of within-group cohesion.

Girls and less powerful boys responded in different ways to verbal harassment. On one occasion, Vinh fought back:

[After gluing his flip-book, Vinh wrapped it in waxed paper.]

Stuart: You don't wrap it, silly fool.

Vinh: Does it matter? What's the difference?

Rick: Yeah, you silly fool, you wrapped it.

Vinh: Shut up, you big mouth. 4-3757

But usually the less powerful boys passively accepted their subordination. A few girls, on the other hand, frequently responded to the boys' comments by telling them to "shut up," by calling boys "stupid," or "nerd," or by ignoring them:

Jay [cutting masking tape]: Can you help me with this?

[Tina did not respond.]

Jay: You're gay.
 Tina: What did you say?
 Jay: I said, you're gay.
 Tina: Oh go away. How you live! 6-971

LE: What are you going to do with the wood?
 Rick: Molest it.
 Jay: Jennifer is going to rape it.
 Jennifer: Oh, shut up. 2-1449

Rita [to Jay]: You fart! Bug off! 4-12(12)

Other girls, like less powerful boys, were more likely to move away from the dominant boys or remain silent.

In interviews, girls and less powerful boys did not raise the dominant boys' verbal harassment of them as an issue. When I drew girls' attention to the boys' talk, the girls substantiated my observations, but their reaction was usually one of denial:

Rita: What do you mean? Like what?
 LE: Like "cow."
 Rita: Oh "cow"'s a normal one, yeah. That's what guys call girls when they get mad at them....It doesn't bother me 'cause I don't really care, you know. I know they don't know any better so I don't say anything back. I don't care. Even if they do say something to me I don't listen, or if I'm really mad I'll call them a name back.
 LE: Do they call you anything else?
 Rita: "Slut," "tramp," "ig," "whore," "bitch," stuff like that. I just tell them to shut up. 6-9(14)

Similarly, Tina objected to boys' talk but told me that she became accustomed to it:

Tina: Some of the guys are really sick. They talk like sick, like gross stuff. It doesn't really matter to me, 'cause I've got used to it. 4-8(15)

And some girls blamed other girls:

Maria: Actually, some of them ask for it, right? Some girls are -

Tanya: They flirt. They flirt 24 hours a day, every second.

Maria: And they dress for it. I'm not saying that all girls - in Grade 8 there are just a couple of girls, but in the higher grades there are more. 1-5(34)

The girls' reactions suggest that they took the boys' misogynist talk for granted. It was an accepted part of their everyday experience.

Similarly, the less powerful boys did not raise their domination as an issue. When I specifically asked Hung how he felt when David and Rick refused to work with him, he responded briefly:

Hung: It makes me mad, that's all. 6-771

David, on the other hand, excused the dominant boys' treatment of Hung:

LE: Some of the boys make fun of other boys.

David: Yeah, Hung. Hung doesn't notice it, though.

Hung's kinda weird, but he's a nice guy though.

17-9(15)

David claimed to like Hung, despite his harassment of Hung in the classroom.

The verbal harassment was pervasive, but contradictory. Some boys said that they liked girls, yet engaged in sexist, racist, and homophobic slurs against them. Some boys engaged in camaraderie, yet denigrated other boys and each other. Some girls objected to boys' remarks, yet accepted their behaviour as "normal," blamed other girls for the dominant boys' behaviour, and occasionally used sexist talk against each other. Such contradictions highlight the complexity of gender relations in the classroom.

Silencing

Girls and boys came together during the teachers' demonstrations or large-group discussions. On these occasions a group of boys dominated student-teacher interaction, but how they did this varied between home economics and technical studies classrooms.

In home economics, the dominant boys answered most of the teachers' questions, they asked questions, and they corrected and ridiculed girls, less powerful boys, and the woman teachers. The following scene is typical of what happened during the teacher's demonstrations in the food and nutrition section of the program:

Teacher: What did I do with the margarine for the biscuit mixture?

Jay [shouting]: Cut it in!

Rick: Chop it!

Teacher: What did I use to mix it?

Tanya: A spoon.

Jay [shouting]: A fork!

Rick [shouting]: A fork!

Teacher: A fork is okay. How do I add the liquid?

Jay [shouting]: Pour little by little.

Teacher: Right.

Jay: Don't you have to turn on the stove stuff?

Rick [laughing and mimicking Jay]: Turn on the stove stuff!

[Laughter from boys' side]

Teacher: As it forms [a dough] what do you do?

Jay [loudly]: Mix it together! You use your fingers. You forgot the flour!

Teacher: I haven't got there yet. Have any of you made biscuits at home?

Jay: I made it. I fed it to the birds and the birds died!

[Loud laughter from boys]

[The teacher made the dough and rolled it out to make a pizza]

Rick: Isn't that small?

Teacher: It's plenty big enough. If it sticks what do you do with the dough?

Vinh: Put flour on it.
 Bao: Isn't that thin?
 Rick: Man, that's thin!
 [Loud laughter from boys]
 [The teacher pricked the bottom of the pizza dough. She explained the reason for this with reference to a hot air balloon. Jay and Vinh started to make farting noises, Danny and Bao joined in. Loud laughter from the boys.]
 Teacher: You can add lots of ingredients to pizza. I know someone who even likes banana.
 Vinh [pointing to Jay's neck]: Hey, look at this.
 Trung [quietly]: A hickey.
 Jay [laughing]: Jenny gave me this. Jenny gave me a banana split.
 [Boys laughed quietly]
 Danny [thinking boys were laughing about banana on pizza]: Banana's good with it, you know.
 [Boys laughed loudly] 5- 55(2)

While girls rarely laughed at the boys' talk, laughter from the less powerful boys had the effect of supporting the dominant boys' behaviour and discrediting the teacher. Evident also is how heterosexuality interweaves with male power. In addition, the example shows how the teacher tried unsuccessfully to relate to the students' experiences because of the power of the dominant boys.

In the other sections of the home economics program, the dominant boys continually challenged the teachers:

Teacher [demonstrating]: Oops, I didn't bring scissors.
 Rick: You mean shears.
 Teacher: Yes, that's a better term. Shears are for fabric. They have a different shape. 3-2194

Teacher: Don't stand there, you can't see.
 Jay: I can. 3-526

Teacher: You should be sitting at your desks, boys.
 Bao: I can see better here. 3-770

Teacher: Are you going to do that little job for me today?

Bao: I am going to do this [math homework]. 3-4122

Teacher: Did you get it right this time, Stuart?

Stuart: Yes.

Teacher: Well, press it.

Stuart: I'll do it next day. 3-4000

Teacher: As men if you are capable of earning \$50,000 a year and your wife is earning \$40,000, who will look after the children?

Rick: If you have that kind of money you hire a maid. Think about it. 1-538

The boys interrupted woman teachers:

Teacher [demonstrating]: Stop before the -

Ray [interrupting]: The corner.

Teacher: Yes, stop before the corner. 3-634

Teacher: Maria, would you put that iron on the counter please before -

Bao [interrupting]: It breaks.

Teacher: Yes, it breaks. 3-804

And the boys devalued the teachers' work. For example:

[The teacher was going over answers to a test on parts of the sewing machine.]

Rick: What about needle placer?

Jay: What about needle position?

Teacher: I think I said that.

Stuart [laughing]: You didn't say that. What about thread spool?

Rick: How about thread clamp?

Teacher: No.

Jay [laughing to Stuart]: Hey Stu - uplifter?

[Rick, Jay, Stuart and Danny all giggling. Stuart put his head on the desk laughing.]

Jay: What about bed?

Teacher: Yes, bed [of sewing machine] - B.E.D.

Trung: Gee, it's hard to spell.

Teacher: The last one is?

Rick: Foot control.

Teacher: Yes.

Jay: What about gas pedal?

Teacher: No, it's not the gas pedal. 3-1882

These comments are illustrative of how the dominant boys repeatedly responded to their woman teachers. Although each incident was minor, there was a cumulative effect. While

the boys' comments did provide a means of them having a voice in the classroom, their empowerment became a problem when it discredited and devalued the woman teachers, and silenced other students.

The dominant boys' banter restricted the opportunities for girls and less powerful boys to talk, thereby silencing them. Less powerful students, occasionally, tried to break their silence. The dominant girls - Jennifer and Rita - and a less powerful boy - Ptan - tried to interject their own experiences into the family management curriculum:

Teacher: Does anyone know what joint custody means?

Rick [loudly]: They cut her in half.

Rita: They have joint custody of me. They both have to agree about me. They both have a say in it.

Stuart: They both have to give you money.

[Laughter] 1-1428

Jennifer: My aunt is East Indian and she lives with her aunt and her brothers. They are all from India and they have nowhere to go.

Rick [shouting]: A hundred aunts living in a house.

[Loud laughter from boys' side.] 1-1519

[Ptan was telling the class how his group had decided to spend the 'Family Budget.' Bao interrupted Ptan-]

Bao [shouting]: You can't buy clothing for \$100.

[Stuart and Bao laughed loudly at Ptan. Noise level increased. The remainder of Ptan's response was inaudible.] 1-1738

Teacher: Can you give us examples of men on television?

Ptan: Men are always shooting and dying.

[Bao began to make shooting noises, as if ridiculing what Ptan had said. Other boys laughed, loudly.]

1-837

Ptan: Somebody said about me "You know that shrimp is the shortest guy in the whole school."

[Silence]

[Bao laughed loudly.]

Jennifer and Rita said something to Bao in Ptan's defence. [Inaudible, noise level high]

Teacher: Yes, that's a really hurtful thing. Why do we value taller people? In the long run does it make a difference how tall someone is?

Rick: Yeah, you can't reach the cookie jar.

[Laughter] 1-2230

These examples show the additional barriers that dominant girls and less powerful boys faced in home economics classrooms. Those who spoke out, were corrected, interrupted, made fun of, or drowned out by the dominant boys.

Although home economics teachers showed concern about the amount of noise the boys were making, they did not usually address the content of boys' talk. Teachers said:

Boys, I don't mind you socializing. You have to remember we can all hear what you are talking about. You talk too much. 3-4590

Keep it gentleman-like. There's too much chatter....Just remember this isn't the locker room. 3-61(10)

Be quiet! We don't need details here. 1-2310

I don't like the conversation here. 1-2312

Some of you are quite rude. 1-1214

By suggesting that such talk should be kept private, or reserved for the locker room, and by not being explicit about the content, teachers may inadvertently have condoned the content of boys' talk.

In technical studies, the dominant boys did not openly ridicule girls as they did in home economics. Nor did they challenge, interrupt, or devalue the technical studies teachers. However, the dominant boys continued to dominate

question-and-answer sessions in the technical studies classroom. For example:

Teacher [going over the homework question about change in technology]: Okay, who wants to go first? Who wants to volunteer?

[Maria raised her hand.]

Teacher: Yes, my dear.

Maria: The shape and sizes of telephones.

Teacher: Yes, you can get them in many shapes and sizes.

Maria: They've changed the shape.

Teacher [showing students an early telephone]: What's missing?

Rick: The connector. The dial.

Teacher: How did they get through?

Jay: The operator.

Teacher: What other changes are there?

Bao: Isn't there a telephone with a television where you have to speak?

[Stuart raised his hand.]

Teacher: Yes, sir?

Stuart: Size.

Teacher: Yes. Very small ones, cellular phones and some are very light.

Trung [quietly]: Cellular aren't light.

[Jay raised his hand.]

Teacher: Yes sir?

Jay: Expensive.

Vinh: Functions. Some have memory and everything.

Bao: Re-dial

Teacher: Yes. My daughter has just bought a telephone it has 12 memory.

[Rick raised his hand.]

Teacher: Yes, sir?

Rick: There's software on most of the phones now.

Teacher: What does that mean?

Rick: Like it's pre-programmed. It has link features....

Teacher: Okay, let's look at radios.

Trung: We've got FM.

Stuart: More stations.

Vinh: Classic stations too.

[The teacher showed students an old radio.]

Bao: Does it still work?

Teacher: What has changed?

Bao: Size.

Jay: Digitals.

Teacher: What does that mean?

Jay: Digital tuning. Instead of needles there's digital numbers.

Rick: The range of frequencies it covers.
 Teacher: Anthony? [Anthony was drawing - no response]
 Teacher: Tina? [No response]
 Teacher: Trung? (No response)
 Jill: Plays tapes.
 Teacher: Yes.
 Lily: You can change while you're recording....
 [Inaudible, noise level high]
 Teacher: It really is the frequency that you're
 changing. 6-551

This was the first time that Maria had volunteered an answer all year (it was May.). Evident here is the way the teacher responded to Maria as "dear" and to the boys as "sir," and how the noise level increased when Lily spoke. Also evident is how a small group of boys dominated the setting, while most girls and less powerful boys were silent.

Occasionally the more powerful girls tried to enter the conversation in technical studies. In the following example, Jennifer attempted to intervene:

Teacher: What do we call a person who designs houses?
 Stuart: A designer.
 Teacher: Well, we call that person an architect.
 Engineers also use drafting.
 Danny: What about designing a computer?
 Teacher: Yes, a computer technician. What else do engineers design?
 Rick: Bridges.
 Teacher: We call them a structural engineer. A civil engineer designs tunnels, roads. Do any of you know where an important tunnel is being built right now?
 Jennifer: Oh, it's called - I can't remember. I know it, but I forgot.
 [The teacher described the Channel Tunnel project.]
 Teacher: What do we call someone who designs clothes?
 They draw plans for clothes. You just took clothing.
 [No response]
 Teacher: A pattern designer. What else?
 Rick: Furniture.
 Teacher: Yes, a cabinet maker or a furniture maker.
 Who reads drawings?
 Jennifer: A seamstress.
 Rick: A carpenter.

Jennifer: A plumber.

Teacher: Yes, so we don't end up with a sink in the dining room instead of the kitchen....What do we call a person who designs maps?

Rick: A cartographer.

Teacher: Okay then, a designer - what does he draw?

Rick: Plans of things that are made.

Teacher: Plans of things that are made. I hope you all remember this. 4-427

This example shows how the teacher attempted to draw other students into the conversation by relating concepts of design to students' experiences with clothing and furniture. But because students were not required to develop their responses, the discussion was limited and lapsed mainly into traditional notions of design and technology.

A few girls challenged the technical studies teachers, while the boys remained quiet. This was most noticeable in the woodwork classroom:

Teacher: Okay guys, you have to saw this 10 inches long.

Gemma: I thought we were going to make a rack [for cassette tapes].

Teacher: No, you are going to make a box.

Gemma: But you said. I want to make a rack! 2-1559

[The teacher began to demonstrate how to use the hand-saw.]

Jennifer: We already know how to saw. You just showed us yesterday. 2-1641

Teacher: We're going on a ship, to the engine room, all over the ship.

Trung: Will the ship be moving?

Teacher: No, you'll be walking on water. No, it's in the dock.

Jennifer: Do we have to pay for the bus?

Teacher: No, there's no charge.

Rita: What's the date?

Teacher: We leave Block D, half way through class.

Jennifer: So we get off Block D?

Teacher: You will leave Block D at 10:30.

Bao: We're just gonna miss Block D?

Jennifer: We have a test on Friday in Block D.

Teacher: I can't do anything about that. If you take the test you'll miss the trip....If you are not going to go you still have to come here in this Block.

Jennifer: What are we going to do then? 2-2560

These examples show how the more powerful girls were not afraid to question a male teacher. Yet, the same teacher intimidated the dominant boys. At the same time, the comments suggest an important difference between how the girls challenged man teachers and how the boys challenged woman teachers: the girls questioned the organization of the program, while the boys ridiculed the woman teachers.

In interviews, I attempted to solicit girls' and quieter boys' responses to my perceptions of silencing in the classroom. Some girls did not see themselves as silenced:

Tanya: In class, me and her we talk a lot.

Maria: Actually, it's weird. We don't like talk a lot in the halls, just in class.

Tanya: In class, it's talk, talk, talk, like with Jennifer. But then the other girls talk with their friends a lot....In class, we talk a lot. 1-27(20)

Rita: Mr [name of teacher]'s favourite saying to me was, 'I'm going to get the staple out.' Staple me to my seat. Girls like to gossip. They like to talk to each other...like 'Did you see what she was wearing today?' or something about our work...or 'Did Johnny phone you last night?' stuff like that. 6-4(9)

These comments reflect the importance to girls of social interaction in the classroom. These girls did not feel silenced in the classroom because they were able to talk to other girls on an informal basis.

When I pushed for students' responses to being silenced in the formal teaching situation, students explained their silence by blaming themselves or the teacher. Girls said they wanted to absorb the information, or they were bored, or too shy. Quiet boys said they just didn't want to speak out in class or get into trouble. Although girls and less powerful boys did not comment on their own silencing, Ptan said:

If I was a girl I would get angry, because sometimes the boys they kind of criticize what the girls say, so I think if I was a girl I would get angry inside.
20-12(17)

And Ray, a quiet student himself, said:

Ray: Seems like the girls barely talked. They probably work harder. Maybe they don't have anything to say.
13-3(19)

Whereas most of the dominant boys were unable to explain their behaviour, Rick said:

I talked a lot, but off call, when I wasn't supposed to. I guess I did a fair amount of that....It could have been a bit of protection, but I doubt that, um I'm not too sure....I don't know, it just kind of pops out - out of nowhere...just making fun of what we were talking about....I guess because we found it boring, or I'm not too sure...because we had already reviewed all this, I guess. She was practically reviewing half the stuff that I did in Grade 7, in the family life program....Grade 7 was a preview to what we did.
18-4(47)

Rick viewed boys' actions as "fun." His view complies with girls' views of boys "having fun" discussed earlier.

I tried to find out why the boys corrected, challenged, and ridiculed woman teachers, but did not do so with man

teachers. Some boys said that male teachers were more strict than female teachers:

Bao: Miss [name of teacher] is easier. She doesn't mind if you talk. Mr [name of teacher] he does. Like when he takes attendance and all that and like if you're late you're in trouble. Miss [name of teacher] doesn't mind. It's kinda easier. Some people are scared the way he talks so loudly and he's big too.
19-3(17)

Danny: Probably 'cause different sex or something. 'Cause I guess he's real big, I guess. It was different with him 'cause he looked so mean and that, so I guess everybody thought - I dunno, we were acting a lot nicer. 'Cause there was a lot more dangerous stuff in there. There was saws and you could cut your hand off, or whatever....If you did something really bad he'd get pretty angry at you. He'd get mad at you.
10-5(6)

Others were not so sure:

Rick: Mr [name of teacher] was strict. We've seen him yelling there, so it kind of influences you. Miss [name of teacher] was pretty strict too, I guess. We thought that Miss [name of teacher] was less strict, but they were about the same though. 18-8(21)

These comments suggest that although perceived strictness of the teacher and who "minded" may have been a factor, the boys had difficulty providing an account of what might have caused the difference in their responses to female and male teachers.

Battering

Physical abuse was another way of enforcing domination in the classroom, and thereby constructing traditional gender identities. This ranged from what might be called physical harassment to battering. Dominant boys physically harassed less powerful boys:

Stuart: Hey, Ptan you didn't get hurt did you? Didn't I put you down?

Ptan: No, you dropped me.

[Stuart laughed] 6-2744

Ptan and Stuart talked to the teacher. Stuart put his hand firmly on Ptan's head as they talked. 2-2768

Bao blew air from the hose in Hung's face. 2-2839

[David came behind Ptan with a large pair of wire clippers. He touched Ptan's neck and Ptan jumped.]

Ptan: Oh, David it hurt.

David: I didn't hurt you. 6-3331

[While waiting to leave, by the door.]

Danny [grabbing Ptan's shoulder]: Go beat up Jennifer, Ptan.

[Danny laughed. Ptan looked frightened and angry. He moved quickly away and went to his table. The bell rang and students left the room. On leaving, David put his arm around Ptan's shoulder.]

David: I wouldn't say anything like that to you, Ptan. 1-2672

In the latter example, although David occasionally abused other less powerful boys, he came to Ptan's defence. In comforting Ptan, David showed there were limits to his tolerance of abuse of other men.

Aggressive behaviour in the classroom was evident between dominant boys and some of the girls. Although incidents were isolated, and were often disguised as humour, they had a cumulative effect:

[Jay kept hitting Maria on the head with a pencil and tapping on her pencil-case.]

Jay: I like bugging you. It's fun.

[Maria did not speak, nor did she look up at Jay. She looked annoyed.] 4-2431

Stuart put his hand firmly on Gemma's head, pushing downward...He tapped her on the shoulder, she turned and then he slapped her hard on the back. Gemma moved away from Stuart, without saying anything. 2-3550

[David came over to Lily and Poonam as they were drawing their flip-books.]

David [to Poonam]: Oh, you're making a little stick-man. Put a little guy with a machine-gun in his hands.

[David mimicked as if pointing a machine-gun at Lily]

Lily: Goodbye.

David: It's [drawing] not that bad. 4-3698

Danny was 'playfighting' with a girl from another group in the corridor. She was hitting him in the back and pretended to kick him in the groin. Danny held her up against the wall by the lockers. They were fighting and laughing at the same time. Danny moved to Gemma. He put his arm around her and ruffled her hair....Poonam and Lily watched at the side as they waited to go into the room. 6-1899

Stuart, Jay, and Bao were tussling in the corridor. Stuart pushed a girl, who was walking by, in the back. She kept on going. Gemma arrived. Laughing, Bao and Jay forced Gemma on her back on the floor. Gemma laughed, shouting 'No.' 'No.' When she got up she held her back as if hurt. 2-2590

In these examples, it is important not only to look at the boys' actions, but also to examine the girls' responses. The boys' aggressive behaviour ranged from tapping the girls on the head with a pencil, to a mock rape, to pointing a "machine gun" at them. All were presented as friendliness and humour. The girls' responses ranged from moving themselves away from the boys, to telling the boys to move away from them, to compliance with the boys' actions. Physical contact undoubtedly involves sexual attraction. The combination of physical aggression and heterosexual attraction adds further to the complexity of gender relations in the classroom.

The classroom context can inhibit or promote battering. The threat of physical violence was most evident in

technical studies classrooms where students handled potentially dangerous equipment. Here the more aggressive boys played with the equipment, sometimes threatening each other, less powerful boys, and girls:

[Around the acid tank]

Anthony: One minute left. Put on the heavy duties.

[Anthony put on the rubber gloves.] If the stuff gets on your face or on your clothes it will eat them away.

[Holding up his gloved hands to John's face. John laughed] 6-1420

Rick [poking David with a soldering iron, pretending it was hot]: I'm gonna burn you.

David: Me to you. 6-1541

[David walked around the room wearing the rubber gloves used in the acid tank. He pretended to put his hands in students' faces.]

David [holding his hands up to Ray]: I got acid.

[Ray looked angry and walked away.] 6-1627

Bao picked up the air hose and squirted it at Danny and then at Hung. Danny walked away. [I think the air hurt his eyes.] Tina, who was close by, moved away from Bao and the air hose. Bao squirted air at Gemma while she was sanding. She stopped what she was doing and moved away. 2-2839

While less powerful boys did not comment on the dominant boys' behaviour, girls commented that they sensed danger around boys:

[Tina was getting paper towels from a holder on the wall beside the acid bath.]

Tina [to David]: Don't open that until I'm past. 6-1612

Lily [to LE]: There's nothing wrong except that - well, [Anthony] takes a knife, you know, and he pokes the bench. He scares me sometimes. 9-3(46)

The incidents of physical abuse were isolated and were often disguised as humour. Nevertheless, I would argue that the pattern of physical abuse practised by the dominant boys

is indicative of the acceptance of violence against women, and against men who do not support traditional notions of masculinity.

The dominant boys worked at upholding a kind of masculinity which entailed verbal abuse, silencing, and "battering" women. Boys who did not support these practices, became victims of subordination and domination. At the same time, heterosexual attraction and girls' and less powerful boys' compliance with their domination, highlight the complexity of gender relations in classrooms.

Heterosexual Relations/Policing Homosexuality

While the antagonisms of gender were evident in the classroom, girls and boys seemingly felt differently about heterosexual relationships outside of the classroom. The students emphasized their heterosexuality through ideologies of romance and sexual pleasure, and prohibitions against homosexuality.

In interviews, I asked students to tell me about what they did in their spare time. Girls and boys talked to me about similar heterosexual pursuits:

Rita: Shop. That's what girls do my age, they shop. They go to [name of shopping area] on the weekend and hang out in the malls and shop. Find boyfriends.

LE: How does that happen?

Rita: Like you sort of meet together. Like you'll be walking down the mall and the guys will be coming this way and you'll stop and ask them for the time - if you think they are cute, you know.

LE: What else do you do?

Rita: Shop, shop, look for guys and then go home.

6-5(8)

Vinh: Go shopping - for clothes and stuff -to [name of malls] with my friends - sometimes girls, but mostly boys. Go shopping for clothes and - then girls.
[laughed]

LE: You meet girls when you go shopping?

Vinh: Yeah, sometimes, unless we really had to go for clothes. Like if there was a party we'd go shopping for clothes. We just get a [girl's] number from our friends and then we talk to [girls] on the phone. We just tell them to meet us somewhere. We just wander around the mall, or go to a movie, maybe. 1-1(36)

At other times, girls and boys expressed their heterosexual interests in different ways. Girls talked about romance; boys talked about sexual pleasure. Occasionally, the girls' comments were free from illusions about romance:

Tina: Like guys like a girl, but then the girls don't like them. 'Cause the guys usually go for girls who are like pretty and good looking and the girls usually go for the looks and the smartness.

LE: Guys don't go for smartness?

Tina: No. Not smarter than they are. Like if you're over smart and he's a little dumber than you, then he might not even go for you at all. 4-10(37)

Rita: Did you say [name of male] is driving her? He's renting [a limousine].

Tanya: She's just going so she can get the limo' ride, I would. 4-1294

LE: Is it important for a girl to have a boyfriend?

Maria: No.

Tanya: It's not important, but now it is 'cause it's gone on for a year already. Like before I went out it was 'So what.' I didn't really care then. Now I see him mostly every day.

Maria: Don't you get bored?

Tanya: Well, mostly every day. Like I saw him yesterday, but not every day. 1-26(43)

More often, however, these girls, held older boys and men in reverence and romanticized about them:

[Maria called Rita over to her desk.]

Maria: Did you see what it says [on this desk]?

[Girls laughed. Rita added another message to the desk.]

Rita: I'm gonna write him a letter saying 'What you do in Graphics 11?' It wasn't here last day was it?

[The message read 'WC + RA - I love you too. Love RA']
4-1194

[Maria and Tanya were winding yarn for their kites.]

Maria: Are you going to [name of school] dance again?

Tanya: I might. Jeff still goes there.

Maria [referring to the yarn]: Do you want a mixture?

[Tanya nodded]

Maria: Does he know you like him?

Tanya: Yeah. Well, I don't know if he does. He's in basketball. 3-66(32)

Jennifer [ironing]: How old is he?

Tanya: He's older. He's really nice. 3-39(46)

Melanie [to Jill]: Don't tell anyone I told you, but Rita got mad at her. He's not old enough. He should be older. 2-2819

Melanie [sanding]: He came over one day, but I didn't see him.

Poonam: Does he go to school?

Melanie: He's really neat. He has a car and he just got it cleaned up.

Poonam: Does it have rust on it?

Melanie: Why do you say that?

Poonam: Where does he live? Does he have a house?

Melanie: No, he lives in one and he fixes up another one. He's gonna rent it out. I was helping him do it. He said 'If you want I'll pay you.' I said 'You don't have to do that.' So, he said 'Okay.' 2-2847

Tanya: She was crying, right. She was trying to overdose. She didn't know where she was, it was awful. We were laughing. We didn't know what was going on.

Rita: Who was she going out with? 4-919

The girls' comments reveal how their interests in older boys and men resulted in actions ranging from graffiti, to doing unpaid work for men, to attempted suicide. As well, the comments suggest that for these girls, symbols of masculinity in men are being older than a woman, being a

basketball player, owning a clean, rust-free car, and having a house!

Although not all girls were similarly interested in romance, as the year passed more girls participated in conversations about older boys and men. For example, at the beginning of the year Tina showed little interest in boys, but by mid-year she was similarly enthused:

[Jill came to class alone. Tina arrived a few minutes later. She ran to Jill and whispered to her. Jill looked angry, whereas Tina laughed, excitably.]
 Jill [shouting, disapprovingly]: He's five feet five, and he's 18!
 [Tina retreated to her table and quietly continued with her sewing.] 3-70(22)

Here, Jill's comments suggest that, unlike the other girls, she disapproves of men that are too old and too short in comparison to women.

The boys' conversations about girls and women, were tied to their interests in the female body and ideologies of sexual pleasure, rather than romance. These conversations involved dominant and less powerful boys:

Stuart: Bao is it Donna or Crystal?
 Bao: Crystal.
 Stuart: She's better looking....She doesn't look good close up though. I like girls that are better looking.
 3-67(29)

Vinh: Kathy had a T-shirt, but the other girls had turtle necks.
 Ray: Did they all strip?
 Vinh: No, only Kathy took her top off. Lisa didn't take her top off....
 Ray: I had no good sleep. We could see the girls across the window. Everybody came to have a look.
 Vinh: Could you see all of them?
 Ray: No, only four of them.

Vinh: Then we told sex jokes. There were some good jokes too. 3-68(8)

Vinh: Hey, Stu yesterday - gave [name of girl] a hickey.

Stuart: Where?

Vinh: On the bed. Everybody was holding her down. 6-1760

I did not hear any girls talk to each other about parts of men's or women's bodies, nor did I hear boys talk to each other about romantic encounters.

On the contrary, the dominant boys' talk legitimized men's abuse of women by stating that women enjoy being battered:

Danny [To Bao]: I remember when Jane smacked Jim's face. Remember when they were goofing around and Jim was bugging her.

Bao: Jane likes it though. 3-444

Danny: Some [women] like being treated rotten. They are used to it. They don't really care. 1-145

These comments reflect the circular power of hegemonic masculinity.

The boys further produced heterosexism through sexual talk. On one occasion a few boys turned a male teacher's talk into a sexual innuendo:

[The teacher told students to look at magazine covers to get ideas for their design projects.]

Teacher: Look at some magazine covers.

[Jay, Stuart, Danny laughed]

Teacher: Look at the information on the cover.

Jay [laughing]: That's even better....

Teacher: There are lots of magazines at the back.

Jay: Yeah, swimsuit issue - awesome! 4-1351

However, boys frequently used sexual innuendos with woman teachers. For example:

[The teacher was demonstrating how to cook pasta.]

Teacher: How do you know when it's done?

Rick [laughing]: Taste it.

Trung [laughing]: It's soft.

Teacher: Yes, you just taste it and it's soft.

[Trung, Vinh, and Danny laughed quietly, repeating what the teacher had said.] 5-43(9)

[The teacher was demonstrating how to make pizza]

Teacher: It's stringy when you eat pizza.

Trung [quietly]: When you eat your penis.

Teacher: Putting more sauce on doesn't necessarily improve pizza.

Stuart: Yes, it does - more is better.

Jay [quietly]: More pussy.

[Boys laughed quietly] 5-56(23)

As well, sexuality was an accepted part of some dominant and less powerful boys' everyday talk. This was most evident in the technical studies classroom:

Danny: Oh fuck [the power] is turned off! 6-2816

David [having difficulty removing the masking tape from his copper piece]: Oh, bugger off. 6-1659

Danny: This is 20 gauge [wire]. It feels the same. [throwing the wire across the bench]. Fuck, I don't understand this. 6-3319

Anthony: Fuck, it's [solder] so hot. Get me a doctor....That [wire] sucks, get another. 6-33752

Vinh [to Stuart]: What the fuck you doing man? 6-3959

These examples, suggest that the boys' emphasized their masculinity through swearing. Because they swore most often in the technical studies classroom, it is possible that the boys' saw swearing as a means of identifying themselves with manual work and with work traditionally associated with men.

Labelling things and individuals as gay or lesbian was another way of constructing heterosexism. For example, while girls and less powerful boys often stood with their

arms around each other, the dominant boys frequently made fun of such gestures:

During the teacher's demonstration Danny put his arm around Stuart's shoulder. Stuart made a face and gestured with a limp wrist, as if to indicate that Danny was gay. Danny laughed, but quickly removed his arm. 3-1679

Some boys labelled teachers, they apparently disliked, as homosexuals:

[The teacher answered the telephone in the classroom.]
 Rick [mimicking]: Excuse me, do you have a Mr Gay [name of teacher].
 Jay: Mr Gay [name of teacher].
 Trung: Mr Gay [name of teacher].
 [Boys laughed]
 Teacher: That table is very noisy. 3-763

As well, some boys labelled girls, and people the girls liked, as homosexuals:

[Maria walked past the boys to get stuffing for her pincushion]
 Bao: How come she transfer out of art class?
 Stuart: Who cares!
 Danny: Who?
 Stuart: Maria. What a gay - no what a lesbian name eh? I don't know why the girls like the gay guys on the block - they suck.
 Stuart: That's why they like them 'cause they're gay.
 3-56(39)

These examples show how misogyny and homophobia are intertwined in sustaining men's dominance over women. Men who were deemed inadequate were equated with femininity and with homosexuality. Girls who were deemed inadequate were also equated with homosexuality, as were the boys with whom the girls associated.

Through heterosexual relations and policing of homosexuality students produced traditional gender

relations. Although at times girls had realistic views about male-female relationships, at other times they held older boys and men in reverence and surrounded in mystery. By emphasizing sexual pleasure, some boys contributed to notions of women as submissive and of men as dominant and abusive. The dominant boys' rejection of homosexuality ultimately suggests contempt for those who do not conform to traditional notions of femininity and masculinity. Although there were complexities and contradictions, girls and boys upheld notions of heterosexual male superiority and female subordination.

The Body and Popular Culture

Expressions of popular culture in and through the body played a part in the production of gender relations. Popular culture - fashion, music, dance, sport, and computers - was given gendered meanings.

Fashion

Creating a certain image through hair style and clothing was important to most girls and some boys. Girls and boys were interested in hair:

Melanie: I can't figure out what's different. What did you do?

Poonam: Nothing. Used some gel. 2-2618

Danny: Bao, your hair looks longer.

Bao: Yeah, no gel.

Danny: Yeah, it looks longer that way. 4-2075

Girls and boys, however, attended to their hair differently.

All of the boys, except Anthony, had short hair:

LE: I noticed some of the boys are having their hair shaved.

David: Yeah, they leave it long here and then they shave it on the side. They just think it looks good. I'm not going to get mine done. I just get mine spiked or something like that.

LE: Where did that style start?

David: It started with a couple of guys. They started it and now a lot of people are getting it done....Just a couple of people had a little bit there, now everybody has this little line on the head, there.

17-6(44)

All of the girls, except Jennifer, had long hair and most of the girls spent time rearranging their hair in the classroom:

Rita [looking at her hair in the teacher's demonstration mirror]: Do you think I should break it up, or does it look good like that? 3-73(12)

Maria: Are you wearing your bangs like that [for the school dance]?

Tanya: I dunno. I used to have my bangs long.

Rita: You used to wear your bangs on that side.

Tanya: Well, I did it over the Christmas holidays. I did it for a week. 4-1294

Occasionally, the girls tied their hair back with ribbons or barrettes. At other times, the girls constantly moved their hair with their hands, or tilted their heads on one side, to keep their hair from falling in their faces. Some girls exaggerated this movement, as if attempting to create a sultry image.

Some girls experimented with make-up and perfume in the classroom:

[While sewing, Rita handed Maria a tray of eyeshadow.]

Rita [looking at the eyeshadow tray]: Would blue look good? Has Jennifer had her hair cut? It looks shorter?
 Maria [preoccupied with the eyeshadow]: I think so. I dunno. 3-73(12)

[Melanie was reading the teacher's Vogue magazine. A perfume sample was embedded in a page. She scratched the page and breathed in deeply. The scent drifted across the table.]

Rita: Oh, gross.

Maria [smelling the page]: I think it's nice.

Rita [removing a bottle of perfume from her pocket]: I bought it.

[Rita took a sniff and passed the perfume to Maria.]

Maria: How much?

Rita: Fifteen.

Maria [smelling the perfume and dabbing it on her neck]: Oh, it's so nice. Did you buy the big one?

Rita: I bought the big one and the little one.

Melanie: Hand over the bottle.

[Melanie dabbed perfume on both sides of her neck. The girls suddenly realized I was watching them. They looked at me, laughing] 3-22(16)

The arranging of hair and make-up took time and skill. It was something that girls learned from each other. The girls' practice contributed to a kind of femininity that emphasizes the notion that women's appearance is never good enough; it must always be improved.

Students also expressed their identity through clothing. While girls and boys dressed similarly in pants, T-shirts, and sneakers, their clothing was also gendered. Girls wore jeans or pastel casual pants some of the time, at other times they also wore tight, black, leotard-type leggings. Some girls, occasionally, wore skirts and some wore frilly blouses under their sweaters. Some girls' sneakers were trimmed with a pastel-pink binding, and their shoes with bows and buckles.

Boys tended to wear darker colours than girls. They usually wore heavy, leather, basketball sneakers. Some boys wore "baseball" caps, inside as well as outside the classroom. Boys' caps and T-shirts were embossed with logos of beer companies, sports clothing manufacturers, and international sports teams. Anthony's shirts frequently expressed violent messages:

Anthony's shirt was embossed with the words: 'Shit,' 'Fart,' 'Party Animal,' 'You piss me off,' and 'Go fuck yourself.' 2-1046

Anthony's shirt read: 'Iron Maiden - Beast of the Road' and had a grotesque creature printed on the front and back. 3-957

The front of Anthony's shirt read: 'Diary of a Mad Man.' 3-644

Wearing clothing with a fashion logo was important to some boys:

[The teacher talked about manufacturer's logos. He asked students to count the logos on their clothes.]
 Jay: What about your glasses, Ray?
 Teacher [surprised]: Do his glasses have a logo?
 Jay: Yes, they're 'POLO.'
 Teacher: Oh, excuse me....[pointing to a boys' shirt]
 Look, 'Nike' has the swoop.
 Jay: It's the 'swoosh.'
 Teacher: Sorry, 'swoosh.' 4-2352

And for other boys it was important to know about the latest sport footwear and to wear it "correctly."

[Danny was showing his white leather, high-cut sneakers to Bao and Stuart.]
 Danny: I think they would look good if they only came up to the green part.
 Bao: Just fold them down to the green part.
 Danny: Yeah, if I just fold it down. Bao, you're so smart. [Danny folded down the top of his sneakers.]
 Does that look good?
 Stuart: Looks like a three-quarter cut.

Danny: I like three-quarter cut better.
 Stuart: So do I. 3-58(41)

Students' clothing also expressed their interest in popular music:

[Rita's T-shirt was embossed with a large photograph]
 LE: Who is that?
 Rita: It's Joe.
 LE: Who's Joe?
 Rita: From 'New Kids on the Block.' 4-2603

[Anthony's T-shirt was embossed with 'W.Y.']
 LE: What does 'W.Y.' stand for?
 Anthony: 'Wasted Youth.'
 LE: What's that?
 Anthony: 'Guns and Roses.'
 LE: What's that?
 Anthony: A heavy metal band. 4-2815

Differences between girls' and boys' fashion interests were evident when the drafting teacher asked the group to draw logos on the blackboard:

Girls' drew fashion logos: 'MEXX,' 'Keds,' 'Esprit,' 'LA Gear,' and 'Coconut Joe.' Boys' drew sport symbols: 'Fila,' 'Nike,' 'Flight,' 'LA Raiders,' and 'LA Dodgers.' 4-2340

Students' belongings were an extension of the body and also contributed to their gender identities. Most of the girls carried pastel pencil cases and binders decorated with pictures of kittens and pop stars. The boys tended to carry plain, dark binders. A few boys adorned their binders with their own drawings and writing:

Anthony drew a revolver, a rifle, and a skull and crossbones on his binder cover. 6-231

Anthony had 'Born to Kill,' 'Sex Pistols,' 'Kawasaki,' and 'Drink Jack Daniels' written on the spine of his binder. 6-1798

Thanh's binder had 'It only hurts the first time' and 'Cow' written on the cover. Ray's said 'I was born horny.' 4-218

I did not notice any girls' clothing or belongings having sexual or violent messages.

A few students crossed gendered clothing boundaries. For example, Rita frequently wore a large, leather jacket and heavy, leather, basketball sneakers, similar to those worn by most boys. Bao frequently wore shoes without socks and leotard-type pants, similar to those worn by some of the girls. Yet, it was Bao who made the most fuss about having to wear an apron in the food and nutrition section of the program:

Bao [putting on an apron]: How do you like my dress?
[wiggling his hips] Sexy, eh? 5-26(21)

Whereas, Jay, more of a "macho" type, did not comment:

Jay sat waiting for the teacher to start. He was wearing his 'Molson Canadian' cap and a yellow flowered apron with frills he had brought from home. 5-222

Although, I did not hear the girls comment about other students' clothing, the dominant boys frequently commented on girls' clothing, especially Jennifer's:

[Jennifer arrived at school wearing yellow and black striped tights and a matching skirt. She changed into jeans at recess.]

Stuart: Hey, Jennifer, why didn't you keep your dress on?

Danny: Hey, Jennifer, where's your skirt?

Jennifer: I changed. [quietly to Jill] They're so mean.

Jill: Yeah, guys are mean. 3-2124

Later Jennifer told me she had changed into jeans because the boys had "made fun" of her outfit. In interviews, the

girls' comments suggest that the dominant boys' response to girls' clothing was not unusual:

Maria: Stuart makes fun of us. Let's say I'm walking past him and he's obviously going to say something about me. He goes 'Oh, look at her pants, they're too big on her,' or something like that. 1-30(32)

Poonam: Sometimes the boys make fun of you and the girls don't like it....Sometimes they make fun of the clothes you're wearing, or if they get their hair permed, they call them names or something. 2-4(23)

The students' comments suggest that some of the boys used girls' clothing as a kind of thermometer or symbol of girls' freedom. Girls who drew attention to themselves through their clothing (Jennifer wearing striped tights) were censored, as well as those who did not conform to traditional notions of men's desires (Maria wearing baggy pants).

Dance

For a few girls and boys it was important to know how to do funk dancing. While these students told me they enjoyed funk dancing and practised at home, Jennifer displayed her skills in the classroom:

[Jennifer and Jay were arguing about who was the best at funk dancing. Jennifer demonstrated a routine.]

Jay: You're awkward.

Jennifer: I learned a new one.

[Jennifer demonstrated a routine.]

Jay: Oh, I can do that.

Jennifer: You don't know how to do it. Show us.

Jay: I know.

Jennifer: \$20.

[Jennifer shook Jay's hand, as if taking a bet.]

Danny: \$20 to do what, Jay?

Jay: Drop. I can do it easy.

Jennifer: Let's see it then, Jay.

Jay: Any day.
 Tanya: He can't do it man. You're can't do it. You're useless.
 Jennifer: I suck at it and I'm better than you.
 Danny: Ooh, ooh, hear that Jay!
 [Jennifer demonstrated the routine.]
 Danny: Do the 'drop.'
 [Jennifer demonstrated the 'drop.'])
 Jay: You jump it. You're supposed to slide.
 [Jennifer demonstrated the move again.]
 Ray: It's not like that.
 Jennifer: Yes, it is! He thinks he's cool, but he won't do it.
 [Jennifer continued dancing]
 Teacher: Excuse me. Can I see you two a minute?
 6-1029

Here, Jennifer was able to demonstrate her skills and express her pleasure in dancing. However, the boys' taunting, and Jennifer's rebuttal, exaggerated her sexuality and tied her to traditional notions of femininity. As well, Jay's response tied him to a masculinity that demanded authority and expertise, and an unwillingness to risk failure.

Sport

Sport was an important part of most boys and some girls gender identity. Most boys fantasized about sport, especially basketball and ice hockey, about their male sports' heroes, and about who, among their own group as well as the national teams, was the fastest and the best, and above all who was going to win.

The dominant boys talked with authority and competed with each other about who knew the most about sport. Their talk was profuse with violent images of "killing,"

"beating," "slamming," or "smashing" someone else. The boys talked often about sport while they worked on their projects. Sometimes they talked about sport they had watched on television:

Trung: Wasn't it supposed to be Mike Tyson?
 Stuart: Not any more. Douglas is now.
 Trung: He got kicked out?
 Stuart: Yeah.
 Trung: Isn't the guy going to get a rematch? Did you see it?
 Stuart: Who?
 Trung: The fight between Tyson and Douglas. I did.
 Stuart: So.
 Trung: I saw it in French.
 Stuart: And you didn't understand a thing. [Laughter]
 The guy wasn't hit, he could have got up.
 Trung: No, he was looking for his mouthpiece.
 Stuart: The guy was stupid, looking for his mouthpiece.
 Danny: Who cares? Tyson will win it back, anyways.
 Trung: When is the rematch?
 Stuart: In a year.
 Danny: No, in July it said.
 [Jill sat in the group through all of this, but said nothing.] 4-1936

At other times, the boys talked about their own games:

Stuart: That guy went and put his foot out. They called it a foul.
 Danny: Casey jumped at him.
 Stuart: That Number 4 guy, right, Nelson pushed him.
 Danny: No, Number 31, the guy called it. I didn't even touch the guy.
 Stuart: He knows what to do. How could they call a foul on me? I jumped up. I went like this [demonstrated what he did]. They called a foul. I didn't head-but him or anything. 4-2135

These examples show how the boys lived the experience of sport. They blurred the distinction between professional sport and their own games. Style, language, and authority were very much a part of the fantasy. The boys re-lived

this fantasy while they worked on their projects in the home economics and technical studies classrooms.

Few girls talked about sport. The girls' talk reflected their interests in sport typically assigned to girls, and illustrated how, through bake sales, they raised funds for girls' events, something which boys did not talk about. Those girls who did talk about sport, talked about girls' gymnastics:

[Tina told me about an inter-school gymnastics competition held the previous day.]

Tina: It was a big competition. We did well. I got 5.5, 7.7 is very good. My friend got 7.6. But my other friend she twisted her leg, she was two weeks off school. This is my sixth year of competition. I started when I was 10, I think. 4-1652

Tina: You know she fell over. She was dizzy. She let go too fast and slid.

Maria: What did Miss [name of teacher] say?

Tina: She wasn't watching. Rachel - on the vault - she got 7.6.

Tanya: Who was the judge?

Tina: She knew what she'd get.

Maria: Don't worry about it. 4-1598

These examples, show how the girls' talk about sport was not diffused with violence and it did not consume them in the same way as it did boys. Although the girls were competitive, their talk emphasized their failures over their successes.

Occasionally, girls and boys talked about sport together:

[Whilst varnishing]

Stuart: What time did you leave?

Danny: Seven.

Stuart: Stupid man. He gave us three passes.

Jay: It is ?

Stuart: No, it's inside line. Grade 9 didn't take any passes.
 Jay: They did. After Grade 9 the score was 54 to 53.
 Jennifer: They didn't lose did they? They have to lose by two points.
 Bao: You don't have to lose by two points.
 Stuart: They scored wrong, they cheated.
 Bao: [The coach] going crazy, eh?
 Stuart: I know. [The coach] said 'We gonna lose today' and we did.
 Jay: I only scored two goals.
 Stuart: I scored three.
 Danny: How many Jasper score? Jasper's not that good.
 Jennifer: No. He's better at soccer.
 Stuart: You could never play.
 Gemma: I could. I play.
 Jay: You could?
 Stuart: I remember when [name of girl] had the nice shorts.
 Jennifer: We had to wear butterfly collars. You guys get the tank tops. At least we get the shorts.
 Stuart: You get other people's shorts. I would rather wear my own. That's a joke. 2-3188

The girls were spectators of, and supporters of, the boys' conversation. When the girls entered the conversation, Stuart changed the topic to comments about girls' shorts, thereby undermining girls' participation in sport.

Computers

Whereas most girls showed little interest in learning or talking about computers, a group of dominant and less dominant boys were consumed by this kind of technology. These boys postured their knowledge about the latest computer technology, whether it be a calculator, a video game, a computerized sewing machine, or a hard drive computer.

In many ways the boys' computer talk resembled their talk about sport. A competition evolved around who knew the

most about computers and who had, or knew someone who had, the latest computer hardware. And the boys who read computer magazines and owned a hard-drive distinguished themselves from boys who just played computer games in the local video arcade. Belonging to the group meant mastering a specific language. Those who could use the language, proficiently, ridiculed those who didn't quite get it right. The language had masculine overtones - "hard-drive" and "joysticks" - terms that the boys turned into sexual innuendos. Who belonged and did not belong was governed by boys' positioning. The boys' computer talk was part of their positioning:

Teacher: I bought a Commodore a few years ago. Remember that?

Rick: Oh yuk! IBM's blown Commodore away.
[Boys started to laugh and made comments about Commodore computers.]

Rick: I got stuck with a Commodore. Okay! 6-251

[Trung, Rick, and John were looking at two computers at the side of the room.]

Trung: Monochrome screen, right?

Rick: It is? Yeah it is. You have a keyboard like this except it's a hard drive, right?

Trung: Yeah. You have a Commodore right?

Rick: Who me? No him [pointing to John].

Trung: It's [school machine] a pretty old one. [To John] You shouldn't have got a Commodore. 6-1377

Stuart: He only plays games.

Rick [laughing]: He has an IBM and he only plays games!

Stuart [laughing]: Yeah, he only has two games, that's all. They aren't even his, they are borrowed. 4-1520

Such talk perpetuated a masculinity interested in technology, competition, and control. I did not hear any

girls talk about computers. Girls' silence on this topic, was part of their gender identity.

Many of the examples show how popular culture is expressed through the body in the context of the classroom. It is not, for example, fashion, dance, or sport in themselves that produce gender identities. Rather, it is the meaning that students assign to funk dancing, fashion, sport, or computers that connects it with gender ideology.

Summary

Thus, while there were tensions and contradictions, the social relations of the classroom played a part in the construction of traditional gender relations. Through best friendships and group formation students developed their gender identities and expressed hostility toward those who did not meet certain gendered expectations.

Although interaction was complex, a pattern was established where the girls were silent and subservient to a group of boys. These boys held power and control over girls and their woman teachers, and over boys who did not support their particular practices. The dominant boys' maintained their positioning through verbal harassment and battering of girls and less dominant boys. The dominant boys' violence towards women became so commonplace that the girls said they became used to it, and they said it should not be taken seriously.

Heterosexism confined girls to ideologies of romance and boys to ideologies of sexual pleasure. Both confined women and men to traditional gendered positions. The posturing of heterosexism also involved the policing of homosexuality. This produced an acceptance of a heterosexual masculinity while prohibiting other kinds. As well, the students' expressions of popular culture - fashion, music, dance, sport, and computers - in and through the body, served to accentuate traditional notions of femininity and masculinity while subverting other kinds.

CHAPTER 6

TEACHERS' REFLECTIONS ON THEIR PRACTICE

Interviews with the teachers and their responses to the observation protocols helped my understanding of the social and political context of teachers' work. This chapter deals with the assumptions that underlie the teachers' work, their views of teaching and learning, the difficulties they face, and the conditions of their work.

This chapter is organized into three sections. The first section explores the teachers' understandings of gender equity and how their commitment to gender as a social issue has shaped their work. The second section deals with the conditions of the teachers' work and the constraints on their practice. The third section illustrates how the teachers viewed my interpretation of life in their classrooms through an ideology of liberalism and individualism. Throughout, the teachers' reflections on their practice provided possibilities for pedagogical change.

Teachers' Understandings of Gender Equity

Interviews with the teachers revealed how their work was shaped by particular views of gender equity. The teachers' understandings about gender equity were reflected in their accounts of their own lives, in their goals for the

coeducational home economics and technical studies program, and in their views of teaching and learning.

The teachers talked to me about their positions on gender equity. Technical studies teachers said:

Steve: I don't think I've ever been a sexist person. I mean I grew up with that sense that boys did this and girls did that, but I've never been one. 7-3(50)

Jim: I don't see any reason why a woman shouldn't be a carpenter and build houses as they are doing more of now, and make the same wages as a man....Instead of going into the office and doing the traditional work that is going on there. No wonder there is a disparity in wages. 11-6(32)

Peter: I try to treat all the children equally. I try to be very careful with my language and I still catch myself on a few things....I try not to use gender specific language with the students. I try to treat them equally and fairly. 9-10(9)

Steve was aware of gender as an issue, while Jim was concerned about equal access, and Peter about personal practice.

Home economics teachers talked about gender equity and feminism. They said:

Janet: I'm not a feminist. I don't think a lot about these things. Maybe I should be more uptight about it all, but I'm not....I'm simply a human trying to do my best with those I come in contact with. I try to be sensitive to them on the basis of what we are doing at the time. And whether they are male or female makes no difference. I believe in justice, but not in feminism. I don't like it when a woman is given a job just because she happens to be a woman - that really bothers me - or because a man is given a job because they don't want a woman. The person best qualified should get the job.

LE: The difficulty is who decides who is qualified and on what basis?

Janet: I know. I know. Women have to do better than men and all of that. I know. I'm the ostrich I bury my head in the sand and I don't think about it. There

are certain things in this life we can't do much about.
1-6(51)

Mary: I'm not a bra-burner, but I think that a woman should remain independent....I'm definitely against man-made laws that make women chattels. I rather like having the door opened for me once in a while, but other than that we are all equals. 3-28(38)

Carol: My major concern in teaching Grade 8 family management is gender equity. That seems to be my over-riding concern....I can't think about any topic without thinking about gender. I can't think about communication without thinking about gender. So I guess I see myself as going through a consciousness raising thing with the kids. Consciousness about gender and family and communication and self. You can't look at yourself without thinking about gender and you can't look at family relationships without thinking about gender. 5-6(18)

Janet was aware of feminist arguments, but she did not support affirmative action, preferring a "humanistic" approach to gender inequality. Mary supported some feminist positions, but did not associate herself with feminism per se. Carol aligned herself with the feminist movement and attempted to raise the consciousness of students in her classroom.

Opportunities for girls and boys to engage in traditional and non-traditional activities were important to the teachers, as children and as parents. Peter and Jim told me:

Peter: When I was in Grade 8 I elected not to take a language. So they didn't know where to stick me. For some reason I couldn't take home ec' so they stuck me in a second block of IE [industrial education]. I had to take Grade 8 IE twice. That was dull so I ended up in drama. I couldn't take home ec' and I wanted to learn how to cook and sew and all that. Now you can, which is great. 9-3(39)

Jim: I have a son and a daughter and I try very hard at home not to make any differences. It's just as important to go to my daughter's soccer game as it is to go to my son's football game. And it's just as important to ask how well she did in her sports as ask him. I sincerely don't want to make that distinction at home. I don't want to here either...because I don't think it should be there. Certainly not in education and certainly not seeing that so many girls don't take physics because of something or other, and math because of something or other, or electronics because of something or other. It irritates me. It really annoys me. I don't want my daughter to get into that scene where she says physics is only for boys. If a girl says this is for boys then that would rile me up and I would be prepared to do battle. 11-15(51)

And Carol and Mary talked about how their personal experiences of oppression as ex-wives and mothers had directly influenced their practice:

Carol: I was always resistant to traditional home ec'....We were caught up in too much detail and we were too picky....We were setting up a standard that couldn't be maintained for women when they go out in the workforce. And we were setting up a standard that men wouldn't be willing to maintain when they were pulling their weight at home. I've been part of the change. When I had two children and a full-time job and no husband, I became more realistic about what people could cope with in homes and families. 5-8(15)

Mary: When I was raising the kids on my own, I had three girls and two boys and everyone did the same. This really hit home and I guess that was why I was so much in favour of coed' home ec'. Everybody learned to do everything. I was going to work and there were five kids....They were taught everything and they were capable of doing it. I think too many mothers do too much for their sons. They're unkind because they are too kind. 3-4(32)

These personal commitments to gender equity extended into active involvement in professional work. Mary was involved in setting up the coeducational home economics and technical studies program in the school:

I felt very strongly that the boys and girls should get the same training...so we asked our principal if we could set up a coed' program. He was very negative. He said 'Oh, the people in this area.'...I said that many men in the area were tailors and cooks so I didn't see that there would be any objection. Anyway we tried to pass it to the staff...but the IE [industrial education] teachers didn't like the idea. They said they would lose their time. We had lots of boys in Grade 8 foods and we knew that we would drop one full class by doing this, but we still believed in it...so it didn't pass that time. But that was with one principal. So we brought it up two years later - we weren't going to let it die. The vice-principal at that time was very much for it and we managed to persuade the principal. So then we got it in, much to the horror of the IE department....That must have been 1980 and we've had it ever since. 3-1(12)

And Carol and Jim told me about their present professional commitments to promoting gender equity in schooling:

Carol: I have sent in my gender criticisms of the new family management curriculum. I questioned the inclusion of certain things, but basically all I was looking for was language. I wasn't looking for the bigger ideas....I'm feeling freer to criticize all of the time as I become more comfortable with it myself. I've always felt like the black sheep, or as if I walked to a different drummer or something. I felt different from all the other [home economics teachers] and sometimes I kept quiet because I felt as if I was always criticizing, always bringing up gender. But now I'm bringing it up more than ever and the people I'm saying it to are more receptive. 5-4(19)

Jim: I'm on the Staff Development Consultative Committee of the [School] Board - that's the committee that mandated the coed' program. By next year all of the schools' [home economics and technical studies departments] will be coeducational. We began three or four years ago....Basically I thought it was the way we had to go - do it now, or do it later. 11-1(18)

The teachers had applied their ideological commitments to their practice. In initiating the coeducational home economics and technical studies program at the professional level, Mary and Jim demonstrated their concerns about

equality of access. In engaging in feminist critique, Carol demonstrated her interest in consciousness raising. Also, Carol's comments echo issues raised in the literature about the difficulties feminist teachers encounter in their relationships with other people at work. Her feeling like a "black sheep" constrained her speaking out.

The teachers' positions on gender equity were reflected in their goals for the coeducational home economics and technical studies program. In describing their courses to me home economics teachers said:

Janet: It is intended to give the students an introduction to the basic areas of home economics. Content is secondary. I think what we are doing is introducing them to a space, to a teacher, to a subject area. Hopefully turn them on in some areas so when they have an option in Grade 9 they will know where they want to go. 1-1(7)

Mary: You don't want to stereotype these roles. It gives them the chance to make some kind of decision for their electives next year...and it's something they have to do all of their lives. 3-3(12)

Carol: I want the students to be able to criticize traditions in terms of what they do to women, what they say about women, the position they put women in. 5-6(22)

And technical studies teachers said:

Peter: Probably the most important part is breaking down the stereotypes - that girls only take home ec' and boys take technical studies. 9-2(51)

Jim: I guess it's to get away from the idea that girls do this and boys do that....It is just as important for women and girls to learn about woodwork - there are all kinds of women now that are carpenters - why shouldn't they be?....The trades should be open to everyone....It is just as important for a girl to use a screwdriver correctly as it is for a boy....I think what we are trying to do is to give them an introduction to the

technologies - these three areas. Hopefully to encourage them to come back and take more courses...to give them enough of an idea so that some of them think...'Well I'll really like to pursue that further.' The objective isn't to have everybody efficiently use tools, although that is important. So as well as the curriculum...it's really to encourage them back into the field at the next level. 11-1(51)

Steve: Well, first of all, I'm not producing woodworkers. If some kid takes a liking to it and wants to go into it, fine. The purpose is more to give them a rounded education. It's part of their education....It gives them a chance and it gives me a chance to teach girls and hopefully get them later in Grades 9, 10, 11 and 12....You know if you open it up to girls then maybe we could get more kids in the shops....that makes your classes larger....A lot of us went through declining enrolments. 7-1(16)

Although the teachers had different views about gender equity, they believed that girls and boys should be competent in domestic and technical work and that the coeducational program would prepare students for non-stereotyped roles and relationships and broader career choices. In this way the teachers' beliefs and convictions challenged traditional stereotypes and promoted gender equity.

Sameness/Difference

In talking with teachers about their commitment to gender equity, I explored what this meant to them in their classroom practice. I raised the issue of whether girls and boys should be treated the same or differently in mixed-sex classrooms. The teachers' responses were divided across subject area and gender lines. Home economics teachers tended to favour a sensitivity to differences; technical

studies teachers believed that girls and boys should be treated "the same."

Home economics teachers said they adapted their programs to make boys feel comfortable:

Mary: I just treat them the same. I figure they've all got the same intelligence. I think I make allowances for the boys if they blunder, but I do for the girls too...but I do just cover the basics because the boys would get a little lost. 3-15(38)

Carol: I want to get boys more comfortable with the things women have traditionally done...so that women can get out and have careers and so forth....To help boys later on in their relationships with women. 5-1(33)

Janet said she was trying to achieve a delicate balance between treating students equally and yet differently. She said:

As human beings we should treat each other equally to a certain extent as far as respect and the basic kinds of things we expect from one human being to another. But you have to treat them differently. I have difficulty talking about it. When you are speaking to a whole class of kids you speak to them as asexuals. You don't even think about it, but when you are dealing with them, one to one you have to. I certainly don't treat them the same....You have to make a distinction because they need to feel comfortable....I say 'This is a machine. It has a clutch'....All these similarities to things that are masculine helps. I think I joke with the boys more than I do with the girls....They need to feel secure in what is traditionally a girls' area. 1-5(46)

In talking about girls, Janet said:

I don't think I do anything special for the girls. I simply treat them like young ladies. I obviously don't have much to say about the girls. I don't make the effort so much. I may comment on things they are wearing, both boys and girls for that matter...we may talk fashion things. 1-6(51)

....We certainly get enough girls coming back at the Grade 9 level...so whatever we do is satisfactory for them. I guess they are sufficiently turned on.
2-5(25)

Because girls continued to enrol in home economics, Janet believed that the curriculum was already meeting girls' needs. The home economics teachers' discourse around gender sensitivity mainly focused on boys. Their emphasis was on remediation.

Technical studies teachers articulated the official school stance that girls and boys should be treated "the same":

Jim: Consciously, I don't want to make a distinction [between girls and boys], because I don't think we should. 11-16(3)

Steve: Strictly they are the body that comes in the door, whether it's a boy or a girl it doesn't matter. The girls do just as good a job and just as poor a job as the boys. It all depends on their abilities.
7-2(40)

Peter: I don't think I treat them as girls and boys, it's just more students. I tend to group them by ability and characteristics, rather than boys and girls...I don't think about [gender] that much because I don't think it's a big problem in this classroom....I try to treat all the children equally. I try to be very careful with my language....I try not to use gender specific language with the students. I try to treat them equally and fairly. [Do you need to treat them differently?] I think if you are treating them differently then you are not treating them equally.
9-8(33)

The technical studies teachers did see that students needed to be treated differently according to interest and ability. When I attempted to extend the teachers' acknowledgement of

diversity to issues of gender, the technical studies teachers said:

Peter: I think I am less tolerant of the boys because I think I assume they should know more, especially with the hands-on kinds of stuff. It's terrible to think that, but I think I'm more critical of the boys than the girls in some regards. 9-8(29)

Jim: Unless they put in something specific like jewellery making which is directed at girls - they used to offer a thing called 'Powder Puff Car Care'. So if it's directed at girls they seem to go for it, but if we don't direct it at them - well, I'm not getting many girls back. 11-5(23)

....I bet if you talk to all Grade 8s you would never find one girl who would read 'Electronics Simplified' [magazine]. 11-11(53)

Jim's latter comment agrees with Maria's and Tanya's comments about their lack of interest in technical magazines (See p. 84).

The technical studies teachers wanted to believe that they did treat students the same. They viewed attention to differences among students as discriminatory, but at the same time they acknowledged the existence of diversity among students. The home economics teachers, in their attention to boys' gendered experiences, viewed attention to differences as remedial. Neither group saw attention to difference in terms of providing for girls' and boys' diverse interests, experiences, and ways of knowing.

When this was pointed out in the process of research, home economics teachers wondered about their own practice:

Janet: When I read your observations I was thinking 'Have I crossed over the field so far that I almost teach to the boys?' 'Have I developed a style that is

more exciting for them than for the girls?' I really want [boys] to like it. 1-4(50)

Mary: In one way it would be nice to have a boys' class and a girls' class, because then you could adapt it at a higher level for the girls....I'm teaching to a lower level when I think of it. 3-16(29)

Carol: I have thought a lot about whether I would like to have separate classes because it may be too early for some of these boys to talk about their relationships with women....But maybe we need separate classes not so much for the boys but for the girls, so we can talk about those things without the boys there to put them down, laugh, chatter, or whatever. 1-15(13)

The teachers wanted to meet the needs of students. But they had rejected single-sex education for coeducation, and even in a single sex classroom they would have to attend to diversity among students. Power relations in classrooms would still need attention; less powerful boys, like girls, were humiliated and controlled by the dominant boys.

Technical studies teachers were less ready to accept overall differences between male and female students.

Steve: I don't find much difference between the boys and the girls. Some of the girls are a little reluctant, but they come around. 8-4(4)

Peter: I guess the range of experiences that I am drawing on are common to all children. The difference is whether they are interested in doing it or not. How much they are interested in pursuing it on their own. There are a few kids that have just natural artistic ability. 9-10(41)....The subject matter that I was teaching them - there was very little discrepancy in what the girls can do and what the boys can do....If they are doing good quality work I sort of assume they are interested in it. 10-2(51)

The technical studies teachers reasoned that because girls and boys produced equally good work, the work was

appropriate for both sexes. As well, because girls did not complain and were seen to "come around" it was assumed they were enjoying the program.

As well, Jim said that students' (mostly girls) lack of understanding about what they were doing in electronics had to do with their intellectual development. He said:

[Electronics] is really an introduction to the field. It's working with resistors and different components - this is what a resistor looks like and this is what a capacitor looks like....To have some idea what soldering is all about...and the safety of it. So, it's at that level - here's a recipe put it together. It's not - What is that made of? Why does it do that? None of that. It's strictly identification...and following directions. 11-4(14)

Jim argued that it was inappropriate to expect Grade 8 students to be able to explain what they were doing in electronics. He argued that, given time, girls would understand electronics and take an interest in the area.

Gender Sensitivity

I talked with teachers about the possibility of developing a more gender-sensitive curriculum. Jim said:

What is it that [girls] want that we are not doing? I would love to know the answer to that. I mean the jewellery-making course - that's an example - but they come and go. So that's not the answer. But I would love to know, because I'm quite prepared to make major modifications to entice the girls in, because I think in this day and age it is important. 11-12(33)

Jim is sensitive to the dangers of "one-off," "add-on" kinds of courses. He believed that major changes were required to encourage girls into technical studies at the senior high

school level, but he was not clear about what such changes might entail.

Peter asked me for some specific examples of a gender sensitive approach to technical studies. I suggested that as well as talking about designing bridges and space-craft, he might include such topics as designing a day-care center, a children's playground, or a bus shelter, or discuss the effects of reproductive technology. Peter was interested, but replied:

But, women use bridges too. 10-8(32)

I responded by saying that while women and men use these things, they might have different interests in them because of their past gendered experiences:

I think it's the examples that we use that spark interest because of our past experiences. Like a bus shelter - it might seem mundane to talk about how a bus shelter is designed - but I think that men might look at bus shelters differently than women. If a woman is standing in a bus shelter late at night and beside her there's this life-size photograph of a woman in her underwear - as happens here in Vancouver - then a woman might not feel terribly comfortable....For me the course would be more gender sensitive if it included things that were more directly related to girls' and women's experiences. 10-9(31)

Peter's remark and my response to it show the difficulty of rethinking technology from a feminist point of view. In talking about gender differences there are inherent risks in essentializing women's experience. There are also risks in falling into the trap of changing the project, as I did, without examining the assumptions underlying technology education.

With home economics teachers I raised questions about the possibility of having more student input into the curriculum. Teachers said:

Carol: I guess I don't know how to make it less teacher centered. I do try at times to get the kids discussing things in groups, but that isn't always fruitful. Although I think kids need time to discuss in groups. Though there is a need to control the direction the conversation is going. 6-6(16)

Janet: We did that a few years ago when we had longer with the Grade 8 program. We start that now at Grade 9 - the kids have input into what they make. But you can't do that at the Grade 8 level. There's not time. 1-8(28)

....Well, they get to choose fabric or color. Giving them creative opportunities...I'm not so rigid...I say 'You can put blue stitching on red. You can make it yours. You can make it unique.' If you approach a project like that it appeals to boys and girls. 1-20(8)

Mary: I doubt it - because really the boys would get lost....You have to stick to something simple like muffins and biscuits and then there's four periods gone. Then there's the next six [periods] and that's ten gone....They love to do the pizza at the end, it's just - well, they'd be so disappointed. Kids are awful, if you try and change, forget it. 3-16(46)

....It's very basic, I just don't know what you could do to make it more interesting. I know muffins and biscuits are very dull, but I don't think [girls] have any objection....It has to be simple. The kids have to get it cooked in that hour. I mean what else can you do? 4-6(6)

The teachers' comments suggest that they were receptive to student input. Although Carol welcomed student input, she felt the need to be in control of what happens in the classroom. Janet and Mary justified their hesitancy to relinquish control through their construction of students as accepting of present conditions and reluctant to accept

change. As well, the teachers argued that student input was not possible given the conditions of their work.

The Conditions of Teachers' Work

In talking to me about their work, teachers spoke about dimensions of school organization that controlled and limited their classroom practice. Teachers talked repeatedly about their isolation from other teachers, the intensification of their work, their concerns about subject enrolment, and their additional responsibilities such as student evaluation and safety. The conditions of teachers' work constrained their practice and tempered the teachers' responses to gender relations in their classrooms.

Isolation

For the most part, teachers worked individually and in isolation. At the beginning of the year the teachers met as a group to organize the coeducational program, and during the year they had short, impromptu conversations during lunch or recess to confirm change-over dates and evaluation procedures. But, teachers worked individually on curriculum development.

The coeducational home economics and technical studies program was a teacher-driven, school-based initiative. Because the program was not mandated provincially there was not a formal curriculum guide. Although the District was formulating mandatory directives for Grade 8 coeducational

home economics and technical studies, a curriculum guide was not available. Each school, therefore, was required to develop its own curriculum. Teachers adapted curriculum guides in use prior to reorganization for the coeducational program, and they shared ideas informally with other teachers in the district, but ultimately they made their own decisions about what and how to teach.

The teachers decided on their own about what to include in the curriculum. For example:

Carol: I have to keep thinking about what to do all the time. It isn't very sensible to do much planning in advance because I need to have a sense of what the class is like before I do it. 5-28(16)

Mary: Well, it's very basic. I talk about eating a healthy diet. Then I bring in - well, it's three meals really - a breakfast, a lunch - macaroni and cheese, which is your basic white sauce and cooking pasta, and I put carrots with it so that covers 'fruits and vegetables', and then fried rice. I do biscuits and muffins at the beginning, so the kids get to know each other and they couldn't possibly start a meal at the beginning....I hate to spend so much time on muffins and biscuits, but I don't know if they are capable of putting anything together before they've had muffins. 3-6(6)

Steve: I try to make things they can use. That they can use or their parents can use....It's my decision. I just decide. I like to change them all of the time. I buy books....I'm always looking and if I see something then I make it to see how easy or how hard it is to make....My biggest frustration is to get them to do what I want them to do, not, you know, they decide what they're going to do. You know, if I tell them that this is how we are going to do it and they decide they're going to do it another way, then I get really frustrated. 2-8(27)

Peter: I try to structure everything so that most of the kids can have a feeling of success. I mean a lot of people feel that they can't draw. Graphics is a lot of drawing, so I have tried to structure all the

assignments so they build on each other. For anyone who has had very little experience it gives them some positive feedback. 9-2(44)

These examples also illustrate how the teachers' training, their culture, and remnants of the old curriculum guide influenced the content of the coeducational home economics and technical studies program.

As well as planning their own work on their own, the teachers were required to prepare lesson plans for substitute teachers. In talking to me about how she might change her program to deal with the dominant boys in her classroom, Carol's comment gives some sense of the tensions and constraints that preparing for a substitute teacher created:

Carol: I'm wondering if I should talk about communication and put-downs right at the beginning...but, I don't want to re-order my book. I've written it all into my book and there are two days that have to be taught by a substitute - and good things for a substitute fall on those two days. So, I just don't want to put it in there and not think about the days that have to be taught by a substitute. I have to think about those two days. But, maybe I can change the order anyway without sort of disrupting those two days that have to be taught by a substitute. 5-27(41)

Completing her day-book and planning ahead for two days where someone else would teach her class, clearly caused Carol anxiety. This example highlights a tension between Carol's progressive views about gender equity and the organization of teaching as work.

Because the teachers worked in isolation on curriculum planning, they were not always sure about what was being

covered in the program as a whole. Technical studies teachers were less certain than home economics teachers about what was covered in their area. For example, Steve said:

I'm not sure what he does [in drafting and graphics]....In graphics they get into cutting, pasting and gluing a lot of things. They also do photography. I'm not sure if they do that in Grade 8, though.
7-11(23)

But home economics teachers knew little about the technical studies curriculum, and technical studies teachers knew little about what went on in home economics. Home economics teachers told me:

Janet: I know what Steve does in woodwork because I see the little hot-plates with the tile in the middle. Did he do that? [No]. So he changes the things they make. I don't know what they do in electronics. In graphics - I'm not exactly sure what they do there either.
1-3(52)

Mary: I don't know what they do, really. They do these animated pictures and things. Oh, and some drawings, I've seen a few....They do something with lights, something like that. Is it a crystal set or something? That's about all I know. 3-23(34)

Carol: I only know what the home ec' people do....We each do our own little thing in our own little way without any discussion about it....I'm so isolated. As a teacher you're so isolated, you really don't know what goes on in other courses. 5-2(28)

Technical studies teachers said:

Steve: I don't know a lot about family management....I don't know how far they dwell into the family itself. Foods, I've no idea. I mean, obviously, they learn how to read a menu - work from a menu. Clothing is probably similar to woodwork - where you start with a bolt, cut it, and join it together. 7-10(13)

Peter: I know very little about what goes on in home economics. I saw one of their notebooks on what they

do in family management, and it's quite a different approach. They're not making anything, which is usually what you do in these kinds of courses. 9-3(51)

The teachers learned about each other's areas through students. Time constraints precluded their getting together to talk about their work.

Nevertheless, some of the teachers were concerned about the program as a whole. For example, Peter said:

I can remember when I was in Grade 8 or 9. We made a little square board with two lights that went on and off, and it was called a 'winky dink.' That's what it was called. You were going to make a 'winky dink.' All it was was two lights that went on and off and it was kind of boring. So what happened - it became the little round 'Happy Face.' There's a real problem with any of these courses - you see it happening in home economics as well - projects get in there that fit the bill and never change for years. I think about the kite - can't you see them stacked up at home - three or four brothers have made them. 10-12(25)

But Steve had a different point of view:

Steve: You know we make the duck and then the pencil box. I hope that down the line they still have that when they're in Grade 11 or 12. That's the hope I have for them. Instead of them taking it home and never seeing it again....Maybe down the line, half the kids in the school will have one of those pencil boxes - so that helps a little [with enrolment]. But I try to change it every time - a little different sizing, different wood or something, not all classes are the same. It's not the same, there's always a little difference. 8-10(1)

As one would expect, the teachers had different opinions about the program, but they kept their thoughts to themselves.

Teachers talked about the lack of opportunity for joint curriculum planning:

Mary: I guess we should all sit down and talk about our outlines....When there's a professional day we could sort of put an hour aside and do that, or meet at lunch hour. 3-23(38)

Carol: We could use a lot more interaction time than we get, but there's not much time for interaction in the high school. 5-2(28)

Peter: I can't go looking because we only have one block of Grade 8s. So I don't have a spare when I can go watch them....We only get together about once a year to discuss how we are going to fill out mark books. That's about it. 9-3(55)

Insufficient time during the school day to meet as a group, clearly constrained the teachers' practice. Through the separate organization of their own work, the teachers contributed to the gendered division of labour.

Intensification of Teachers' Work

Inclusion of girls and boys in home economics and technical studies did not result in the hiring of more teachers, or more classroom periods per week being given to each area. Consequently, over a school year, each teacher was responsible for twice as many students as in the previous single-sex program. And students spent only half a school year in each area, compared with the previous arrangement of a full school year in either home economics or technical studies. In other words, for teachers the coeducational program meant twice as many students and half as much time as in the previous program.

As a result, the Grade 8 home economics and technical studies classrooms were extremely busy places. Teachers

attempted to complete as many projects as possible in a short time frame, and they struggled to keep many students working together so that speedier students were occupied, while slower students were not too far behind. Students and teachers were continually in motion, moving from small group to large group, and from one piece of equipment to another. Projects were lost, supplies ran short, equipment broke down and required on the spot repair, there were frequent interruptions at the classroom door, and always there was the pressure of completing projects on time before students either left for the day or moved to the next section of the program.

Of all the constraints on their practice, teachers talked most about a lack of time to get to know students or to devote to gender issues. The teachers' comments highlight the conditions of teachers' work as well as their different pedagogical approaches.

For example, most of the teachers said that they did not have time to get to know the students' names. Carol was the only teacher who made a point of getting to know names:

A lot of teachers take attendance from a seating plan so there is no need to learn their names. That seat is blank so that person is absent. I think that a seating plan does more harm than good....In 16 hours I think there is no excuse for not knowing their names.
6-7(34)

But she also said:

Maybe in family management you have to respond to your class in a way that that you don't respond in any other class. Maybe in family management we're responsive to

the kids like we should be in every other class. But you don't really have much time to be responsive to the kids. 5-28(38)

Other teachers found it difficult to get to know students:

Mary: I didn't get to know them. You don't. I honestly don't even get to know their names....I think I do better in the fall than I do in the summer, I mean they just seem to come and go....I've got the list, the seating plan. I just sort of go by that...maybe I should have, but I don't seem to have the energy, but I don't even know if I would then. Because you're so busy, just moving around to correct them, to do a few marks for them. 3-17(26)

Steve: By the end of the year, I mean, the first kids - I've completely forgotten about them. They say 'Hi Mr [name of teacher].' I don't even know who that is. You see, we see ever so many Grade 8s and you only see them for a few hours. I know in family management they go round in a circle and say their names. It's a different set up here. I don't have time for that. We have so many hours and I want to get as much done as possible. 7-14(49)

Teachers deal with approximately 150 Grade 8 students over the course of the year and this is only one of five classes for them. Despite this, Carol learned her students' names, Mary focused on collecting enough information about students to evaluate them, and Steve was anxious to complete as many projects as possible.

Peter, a new teacher, was concerned about classroom management:

I never want [students] to know that I don't know their names. Because as soon as kids know that you don't know who they are they will screw around....You sort of have to make them think that you know what they are doing all the time even though you don't. Because there is no possible way, but you have to make them think that you do. 10-2(8)

For Peter, being in control was important. Not wanting to show weakness by asking a student her or his name had a cyclical effect and ultimately prevented him from getting to know the students' names.

While knowing students' names does not in itself lead to improved questioning techniques (boys still dominated Carol's question-and-answer sessions), not knowing names is an indication of the teachers' lack of involvement and knowledge about the social patterns of their classrooms. Without such knowledge it is difficult for them to intervene effectively to provide an equitable classroom environment.

As well, the teachers explained their responses to boys' sexist, racist, and homophobic talk in relation to insufficient time and busy classrooms:

Carol: I don't know how to stop them from doing all those put-downs. I've only got 18 hours with them. How am I going to stop them from putting other people down right away? 5-20(20)

Janet: I don't pick up on any of what they are saying....You don't have time, or bother to listen....I am too busy with other things....You see I don't have time to observe all those things. 2-1(7)

Jim: I guess I ignore a lot of things, because of time. 11-9(42)

Peter: A lot of the things I read in here I've never heard and sometimes when there is a rabble of things going on it's very difficult to distinguish where it came from. 10-5(46)

Clearly, teachers were busy and the content of boys' talk was not a priority issue for them.

The technical studies teachers also said that there was too much going on in their classrooms for them to notice boys' domination of girls' work:

Steve: I mean I don't even know what they are doing lots of the time, you know. I'm just thinking three steps ahead of them, to begin with. When I explain something or set them up to go, I make sure they are doing it, then I'm off getting something else ready for them. I don't see [boys doing girls' work]. I want to let them get it done, you know, and then go on to the next step. 8-8(25)

Peter: When Jay took control in there - as long as the stuff was coming out of the dark-room I didn't interfere. Because at that point in the class there were so many things going on and if they wanted to do that, it was fine. In some groups no-one will do that. I have to help them all of the time. If they will teach each other how to do it - great. I remember Jay just lording it over everyone in there. 10-7(40)

Jim argued that he encouraged students to help each other:

Jim: To me it's really important that...they go to each other....I think it's important that they get together.They have to learn to cooperate and to work with colleagues and with their own friends. 11-9(24)

But he was not aware of the gender dynamics involved:

Jim: I asked a boy to help a girl. I didn't consciously work that out. I tried to do it as quickly as I could. This one had finished and this one hadn't. I wasn't consciously trying to put girls with boys. It was luck of the draw so to speak. 11-16(35)

As well, Steve told me that he was not aware of helping or "doing" for girls more than boys:

If they wait long enough, to speed it up, I'll do it for them. I don't know if it's better for them or not better for them. They're not doing it themselves, but a lot of it is for my own benefit too - just to keep everybody together. 7-6(45)

....I just look over there and if I see they are really going slow, I'd go over and help them out with it. A lot of times they will say "Will you do it for me?"

Okay, I don't mind. I mean it's no decision on my part. The decision is to keep them going, keep them up with the rest of the kids. That is the only reason I do it. I don't even notice if it's a boy or a girl or who I'm doing it for. 7-7(7)

The teachers' comments show how the daily routines of teaching, control so much of what happens in classrooms. It was clear that keeping students going, so they could finish projects on time, took priority over concerns about gender relations in classrooms.

Nevertheless, Carol and Peter began to think about ways of dealing with social relations of the classroom. Carol focused on her own education:

Nobody taught us how to teach the social skills....I need to know the social skills required for cooperative learning....I don't know how to do it yet....We have to teach kids how to cooperate and to love one another and to care for one another. I need to know how to do that. 6-8(19)

Peter began to think about ways of dealing with racism in his classroom:

How are you going to cultivate in a class that doesn't deal directly with social issues. If you are in a class you could spend an hour talking about racist comments and how they make you feel, but we don't have time to do that. I guess we could slip it in. Instead of say making them do a magazine cover, I could make them design an anti-racist poster, things like that. But to actually deal with it directly, it's hard to do. Because it's not the mandate of the class. It's not in the curriculum - well, there isn't a curriculum anyway - but it's not part of the curriculum. Social development is important, but with all the other things we have to do it's not a priority. 10-5(41)

By suggesting that he might include projects with a social meaning in his course, Peter reflected upon and informed his

own practice as he spoke. At the same time, his ideas were constrained by the social conditions of teaching.

Subject Enrolment

With a broadening of the school's educational program in recent years to include fine arts, drama, physical education, and a variety of language and vocational courses, there was an increasing number of elective subjects. Consequently, teachers of elective subjects competed for students and resources. Too few students would mean cancellation of a course or a program, and teachers' jobs would be in jeopardy. As a result, the home economics and technical studies teachers were cautious about change at the junior high school level in case it had a detrimental effect on senior high school enrolment.

Concerns about student recruitment were most evident when I talked with the teachers about the possibility of providing activities other than hand and power-tool skills in the Grade 8 program. When I asked whether activities such as reading, writing, discussion, and research skills might be included in the curriculum, the teachers responded negatively. For example:

Peter: I think they should be doing courses. That's why the kids take them. They get enough thinking courses. They want to do things. 9-4(11)

Mary: I don't think they would enjoy it as much. I don't see them doing it. Do you find many kids going through to seniors if they get so much theory?...No, that's just hopeless. When I've given my seniors other things to do they don't do any more than just pick a

recipe and try it, nothing more. I mean you do as much as you can and then you just sort of give up. The ones that are my top students are picking more difficult things and they know what they are doing, but you can't teach to them when there's all these slow ones. 4-7(2)

Steve: I'd loose the kids. They're here to make something, they're here to take something home. If I came in and did theory and stuff like that, I'd lose them in a hurry. First of all they'd sit looking at me - 'Why can't we do this? Why can't we do that?....They would drop out in a hurry. They'll let their friends know 'Oh we do nothing but book work'....I would turn it down. I'd say 'No' right away....They are here to make - they have ideas of what they want to make, so I just have to go with that. 8-24(19)

The teachers feared that curriculum change would have a negative effect on high school enrolment. They justified their arguments by constructing the students as "practical" and not interested in "theory."

Nevertheless, Steve spoke positively about using other approaches. He said:

You would have to have excellent materials. You have to have kids that are willing to put in a little effort and I don't get those kinds of kids, you know, to do research and stuff like that. It would be wonderful if they could. I mean it gives them a background, something to work on....If I could have them for a longer period you might be able to do that. 8-24(27)

Given that all Grade 8 students were enroled in the technical studies program, Steve's view about "not getting those kinds of kids" probably reflects the location of the school in a lower socio-economic area of the city. Again, Steve referred to lack of time as a constraint on his practice.

Nevertheless, in talking about how to make curriculum more attuned to students' diverse interests and experiences, teachers began to question their own practice:

Carol: When I make my plan for the next group I look at what I did with the first group....But, once I had one class, I thought I could just keep doing it over and over again throughout the year. Now, I'm not so sure that I can. 5-28(16)

Mary: I just teach the same old way. My it's dull when you stop to think about it. 4-11(6)

Peter: So, there's culturally adapting projects, sexually adapting projects, and then trying to incorporate all the things we are trying to teach them and are supposed to teach them, so it's tricky. Also, something that will catch their imagination and make them want to do it! 10-13(31)

Responsibilities

In addition to actual classroom teaching, teachers had specified responsibilities. Obligations relevant to this study were student evaluation and safety.

Evaluation.

A school-wide reporting system required teachers to submit marks to home-room teachers at the middle and end of each school term. The reporting procedures created difficulties for the teachers because a) students spent only a short time with each teacher, and b) the school reporting period did not coincide with the change of students from one section to another in the coeducational home economics and technical studies program.

Janet and Mary talked to me about their frustrations with the reporting procedures:

Janet: We do have to sit down and talk about the evaluation system because the way it is being done right now is not terribly satisfactory. We're all a little concerned about that....The last mark [on the report card] was a mark for only the first section. The next mark will be for sections two and three together, or something. I don't know. We haven't sorted it out. They'll know what they got in here on a piece of paper, but it won't be on the report card. It may be a combination of woodwork and this. I think that is the way we'll do it....I talked with the computer guy about setting up six different marks for this, but he didn't seem to think it was possible.
1-5(10)

Mary: It's frustrating...because 15 hours isn't much time. You're only just starting to get to know them and they're gone. And I hate trying to mark them...because it's really not fair. I think we all feel that way. We'd rather have a pass or fail. I don't know why we can't....I'm sure if you didn't have to go around and do that constant marking...it could be more relaxed. 3-20(42)

The teachers' comments illustrate how they had limited control of their workplace. They were forced into a school-wide evaluation system that did not fit the organization of the Grade 8 home economics and technical studies program, yet they felt powerless to change the structure.

Safety.

Students in home economics and technical studies worked with equipment that was potentially dangerous. Technical studies teachers were particularly concerned about physical safety in their classrooms:

Steve: What bothers me is this - how safe they act. That they apply the safety rules....Things that bother me are safety things...pushing, shoving, physical things. I mean that's the only thing I worry about. I worry about that all the time. 7-15(28)

The teachers' concern about safety had implications for gender relations in their classrooms. Being surrounded by potentially life threatening machinery, the teachers told me that they listened to the noise of machinery (to make sure it was being used correctly) rather than students' talk.

The teachers' comments illustrate how school organization limited the teachers' responses to gender inequality in their classrooms. The isolation and intensification of teachers' work, threats of subject erosion, and additional responsibilities placed inordinate demands on teachers. As a result, the teachers had little time or energy to get to know students, to attend to gender relations in classrooms, or to reflect on their practice.

The Dilemmas of Pedagogy

Having teachers analyze the observation transcripts provided a forum for talking about classroom pedagogy. Teachers interpreted life in their classrooms through an ideology of liberalism and individualism, rather than in terms of social constraints of power, dominance, and exclusion. This raises questions about the possibility for pedagogical change given the teachers' ideologies and the constraints on their work. I point to a classroom pedagogy that allows for curriculum as a shared project among and

between teachers and students - one that promotes and encompasses collegiality, cooperation, and respect for diversity.

Issues of Gender

Teachers tended to explain gender relations of the classroom as biologically or psychologically based. For example, Janet and Steve explained girls' silence in terms of girls' size:

Janet: I try to make a conscious effort to look all around the class, but I think I neglect the kids right in front of me. That's what I do - I look to the right and I look to the left....This table of little girls right here [in front] are so quiet. I have to consciously bring myself to this table to talk to them. Otherwise I don't think I ever speak to them. They hardly ever ask a question. 1-3(29)

Steve: The problem is a lot of the aggressive ones stand right in front of you and the little girls in the back can't see anyways, so they're standing there talking to their friends. So that's the biggest problem because all of my teaching is done that way - 'Okay gather round - let's do this.' 7-16(47)

Teachers also explained girls' silence in terms of individual psychological traits:

Peter: Some of the girls weren't confident enough or something, to put out the answer without being asked directly. So I could see some inequality there. I should ask more girls questions....I just ask questions to the class because I don't know their names. When I know I am going to ask some questions, I should just have a scrap of paper with their names on and just say so-and-so, and so-and-so...ask kids that I know won't answer. 10-2(8)

Janet: I certainly try not to give boys more attention than the girls. I think sometimes I do. Maybe it's trying to compensate - to make sure they are with me more than the girls. But they also seem to demand more attention than the girls...the girls work quietly

whereas the boys are always wanting help. They're louder than the girls so they get more attention....I was aware that I was doing it...but obviously you interact with the kids that need you or that come to you. 1-2(16)

Carol: I focused on the rowdy boys....I wasn't so aware of the quieter boys...and I didn't interact too much with the girls...because they wouldn't say anything. Even if I ask them right out they won't say anything....The boys call out the answers and I don't stop them....I like the class to be really sort of casual and it's very hard for me to know how to make it casual and comfortable and still structure the questioning techniques. 5-19(9)

While teachers' struggled to find ways to resolve the problem of male dominance in classrooms, Carol's solution to ask the girls "right out" and Peter's solution to ask "kids that won't answer," do not deal with the problem of silence in the classroom.

Steve was less aware of male dominance in the classroom. He said:

I don't know. I'm oblivious. I don't see [boys' dominance]. I won't look for it. If I was to look for it I might see something, but I don't look for it. 7-12(50)

When we met a year later, however, Steve told me about incidents in his classroom that he had done something about. He told me that he had reported a boy to the principal for sexually harassing a girl in his classroom. Also, in response to my comment about the dominant boys being misogynists and "nice kids" at the same time, Steve said:

Marc Lepine [the name of the man who murdered 14 women at the University of Montreal] may have been a 'nice kid' in somebody's classroom too. 12-1(5)

Steve's response highlights the possibilities for pedagogical transformation when teachers become aware of gender issues and begin to question the taken for granted experiences of everyday life in classrooms.

Similarly, the teachers explained boys' dominance of machines and equipment in terms of psychological development. Teachers said:

Janet: I guess [the less powerful boys] have to learn to fend for themselves. I guess that is all part of the growing up process - speaking up for yourself.
2-8(25)

....[about girls in technical studies] Was it not just because the boys were more anxious to get to the machines and move faster, and the girls sort of doddled along. If one of the girls was really keen she could have been at the front line too. 2-8(44)

Steve: Well, I guess the girls are not as aggressive as the boys in that situation. But they eventually get to it....The boys come in here and think 'Well this is the shop. It's the boys' area.' 7-6(45)

....They're strong academic kids, they're first, they're wanting to do something. If they have nothing to do they'll ask for something to do. [Does that mean that the girls are not strong academically?] No. No. It's just because there's 24 kids and somebody's got to be first and somebody's got to be last. 8-5(17)

Steve's last comment contradicted his earlier assertion that the students were not strong academically (See p. 216). His comment also suggests that boys' dominance is coincidental - it happens by chance.

Steve talked about ways he might improve the sharing of resources in the classroom. He said:

I guess I could put some effort into making sure that we rotate things around - who was first, now goes last, that type of thing. I never really thought about

it....Sometimes, I'll say 'Ladies first' and the boys get upset....I should have a role in it, I guess. I don't know, maybe I should. I don't know if I want to....I'm not a chauvinist at all, but I really don't know. I never even thought about it really. 8-5(23)

Steve's comment "I never really thought about it" was echoed by other teachers. Having the opportunity to engage in conversation about what happens in the privacy of their own classrooms was a new experience for most of the teachers.

In addition, the teachers explained boys' sexist, racist, and homophobic talk in biological and psychological discourse:

Janet: Stuart was a bit of a baby. He needs attention. I was beginning to ignore him from time to time.
2-1(34)

....Boys always have to show off - they are always performing, competing and performing....They are more involved with sex. But, isn't that to be expected with that age boy? 2-3(10)

Carol: Maybe boys are having a hard time dealing with their puberty...the girls seem to be more accepting of themselves. 5-15(13)

Steve: I suppose there are age-group problems or peer problems between boys and girls, and girls like boys, and boys like girls, in certain ages. 7-11(46)

Peter: Some of the boys when they are really immature can be quite annoying. The girls seem to be quite ahead of the boys at that age, developmentally. So you don't get as many immature girls at that age, but you will still get the odd boy who is right out to lunch. I had a couple in the last group - some of them have their motor wound up and they can't slow it down.
9-9(5)

The teachers' comments suggest that the behaviour was not to be taken seriously; it was something that the boys would grow out of in time.

In talking about how she responded to boys' talk, Janet described her approach as follows:

Janet [in response to boys' comments about pictures of women's bodies in fashion magazines]: It's the way boys like to talk. Let them react that way - it doesn't - I just ignore it....The kids are bright enough to know that it isn't real. The fashion magazines and those videos don't interest them for long because it's not clothing they can identify with. I don't think that it's a damaging thing...at least don't take it too seriously - I don't. 1-10(47)

Janet does not see students as gullible. But, when students do react in the way the media intends, she believes that boys' responses should not be taken seriously. Janet qualified her comment. She went on to say:

Well, if I hear something really nasty I would certainly take them aside or something. I tend to humour that kind of situation and make light of it...not to make a big deal of it because that isn't good sometimes....I kind of do diversionary tactics like bring the conversation back to something we are doing here. I don't usually do a direct response. If I hear anything I don't usually respond directly with a value judgement on it. Not that I hear much. 2-6(45)

Janet talked about using "humour" in response to misogyny in the classroom. This view echoes girls' and boys' responses to boys' sexist talk as "having fun" and merely "playing." Again, offensive behaviour was not to be taken seriously. Janet's comment about not responding to boys' comments "with a value judgement" reflects the dominant discourse in school about value neutrality. By her lack of intervention, Janet expressed a value judgement, but she did not see it as such.

Peter said that he might have responded to boys' talk in ways that I missed:

According to this I didn't react, but reaction can be a look it doesn't have to be verbal. I might have responded, but it isn't written down here. 10-5(46)

There are indirect, subtle interactions that take place between teachers and students that an observer might miss. All the same, a teachers' verbal silence might suggest to other students, who also miss the nuances, that the teacher condones a particular kind of behaviour.

The teachers' arguments indirectly supported traditional gender relations by explaining students' practices in psychological and physiological discourse rather than in terms of men's dominance over women and other men. Viewing dominance as a social construction provides more possibilities for social change.

Issues of Culture

Gender relations intersected with other dimensions of students' lives, especially ethnicity. The teachers interpreted the social relations of the classroom through a eurocentric world view.

For example, Steve was aware of the segregation of Native Canadian students. He said:

I think the biggest problem is with the Natives....I mean they stand alone, by themselves, and most of them do that....You can see that with Anthony....The whole time he was basically a loner. You can't force them. I mean, I could say 'Okay, you have to have a partner, so you go sit there.' But he would still be alone, whether he's with that partner or not....I had another Indian girl last year in Grade 12. She never finished the year. She was alone, too. She was by herself. That's what she wanted, obviously. 7-13(42)

Steve described racism as an individual problem and as a condition of social life in the classroom, not as something that could be changed.

Teachers also explained gender relations of the classroom from a eurocentric perspective. Teachers said:

Carol: Maybe I'm talking in opposition to girls' Chinese tradition and that may make life very difficult for them....I think I am talking about things that are very foreign to them....Because boys are Chinese I think they probably don't want to do it because it may be in conflict with the messages they may be getting at home. 5-12(2)

Mary: When they are still young children they don't work well together...when students are more advanced sexually then I don't think you have that....A lot of those Chinese girls haven't gone through puberty yet....They must mature later. 3-6(44)

Steve: A lot has to do with culture I suppose. The East Indians, for example, are very stereotyping with their families. The girls are girls and they have to pull the line and they have to be home a certain time and the boys - hey, he's a boy, let him go and do what he wants, you know, that type of thing. I've seen that happen. 7-13(2)

Jim: I think culture has something to do with it. A lot of Chinese - from what I understand - I don't know - there is this separation. It's not necessarily the thing to do. There are other cultures that simply frown upon it apparently - women working in a supposedly male dominated field. 11-5(48)

The teachers, all of whom were white and of Anglo-Saxon origins, were trying to be sensitive to what they perceived to be characteristics of Asian students. The origin of these perceptions requires further study.

The teachers' eurocentric world view was also evident when I raised questions about the compatibility between the

curriculum and students' various cultural backgrounds. Mary said:

Well, I do fried rice and they all love that. So it does bring it in. 4-4(26)

This comment contrasts with a student's criticism of Mary's version of fried rice as a "Western" version of the dish (See p. 111). Mary further commented on her adaptation to students' experiences:

When I first came here I used to get them to plan breakfasts. I nearly went mad because they would have chicken wings for breakfasts, and you can't start to criticize it. You realize their breakfasts aren't a standard breakfast....So I just gave up on them planning meals because I just thought their concepts are so different than ours. Like the Native and the Hindus have potatoes and rice in the same meal. Now we wouldn't, but I don't think I can criticize them because that is their ethnic background. So I have stayed away from it. I used to do it more and then I just thought I can't start to criticize it. I did say that I thought that one starchy food in each meal was enough and leave it at that. As far as planning and costing out meals, it is just hopeless now. 4-7(29)

Mary was trying to adapt to students, but her views were filtered through white, middle-class expectations and skills. Mary went on to say:

One year in Grade 8 I decided to let them all make something special. I said 'I'd like you to do it at home and if there is any cost I want you to tell me what the cost is.' So they all brought different things. One girl brought chicken feet, which is a great delicacy....I remember one girl was Native Indian and she said something about bannock. I said 'Who knows anything about bannock?' and they didn't. So I said 'See you have something to offer too.' 4-4(26)

Peter realized he was similarly limited by his own cultural knowledge. He said that he had asked senior students to draw twentieth century icons. A couple of

students had drawn a traditional Chinese painting. Peter described the work to me:

Look at this. This is what a couple of Grade 11 boys did. These are culturally specific. I asked the boy to tell me what his drawing meant. He looked at me as if I was an idiot. He said 'Well, the flower came and then the bird came.' It was as if he was saying to me 'Where have you been all of your life?' So this is an example where they have drawn something really important to them. 10-11(44)

Peter noted, however, that students might have more conservative views:

I think I might try some new things with Grade 8 next year, change things around. One thing that is really funny with Grade 8s - they all know what they are going to do. They have all heard from their friends. So it's very difficult to change anything because they have this set of expectations what they are going to do. 10-12(1)

Steve talked about his own inadequacies and the constraints on his practice:

Well, I guess it could be [more related to their cultural experiences]. I've never thought about it like that. I do like the Chinese art, that type of thing. But the Chinese woodworking is a little too complicated for me. They do very fine woodworking and sculpturing and stuff like that. It's alright, but it's a little too fine for me and I couldn't do it either. But I guess we could do that. I never thought about that...though it has to be able to be mass produced. It cannot be individualistic in that it cannot be limited to one machine. Otherwise all of a sudden there's just that one thing that they can do and it backs everything up. 8-21(18)

Steve added to the complexity of the issue when he described a culturally specific, curriculum project that failed:

Two years ago we had an alternate program called 'Spirit Rising.' We had Bill Reid [a prominent Haida artist who has designed among other things, the major sculpture at the Canadian Embassy in Washington] come for four Fridays in a row. But the attendance was

poor. The kids would come or they wouldn't come. The Native students didn't care. Other people would have given their eye teeth for that sort of thing. 8-23(20)

The examples illustrate not only potential factors that limit student input into curriculum, but also how teachers are reluctant to relinquish control of the curriculum. Their view that knowledge lies primarily within the teacher limited the possibility for student input.

The teachers talked with enthusiasm about curriculum projects that had involved student input, but they also pointed out many ways in which they could not adapt, given their own knowledge and the constraints of the classroom. Teachers were committed to gender equity and were interested in exploring ways of changing the curriculum, but turning ideas into practice was more problematic.

Summary

Analyzing the observation protocols provided an opportunity for teachers to reflect on their practice. The teachers' comments revealed their views of gender equity, the conditions of their work, and their assumptions about teaching and learning.

The teachers' work was shaped by particular views of gender equity. It was important to teachers that girls and boys had equal access to domestic and technical work. As well, technical studies teachers worked within the ideology of equal ("same") treatment. They believed in treating students "the same," but at the same time they acknowledged

differences in students' abilities. For home economics teachers gender equity meant providing remediation for boys, according to the teachers' perceptions of boys' needs in a non-traditional area. None of the teachers viewed gender equity as valuing and respecting differences among boys and girls, nor as challenging male domination.

The teachers' responses to gender differences and to the social relations of the classroom must be understood in relation to the conditions of their work. The teachers were extremely busy people, and the coeducational program made their work even more hectic. They worked hard to provide a variety of experiences for students in domestic and technical work. The teachers made an effort to get along with students, with each other, and with other teachers in the school. Each teacher was responsible for ordering supplies and repairing equipment, and for developing her or his own curriculum. And some of the teachers were involved with professional activities outside of their teaching responsibilities.

As well, over the school year each teacher met almost 150 Grade 8 students, in addition to those they dealt with in other areas of their teaching load. Working with groups of approximately 24 students in one-hour time slots, teachers hardly had time or energy to get to know students' names let alone to develop sensitivity to the gender relations of the classroom. Teachers were further

constrained by concerns about declining subject enrolment, by having to conform to a school-wide reporting system, and by having little opportunity for joint curriculum planning and discussion.

Ideological barriers also prevented teachers from exploring gender equity beyond issues of access. The view that knowledge lies primarily with the teacher resulted in a white, middle-class curriculum based in Western culture, for this was the teachers' own background knowledge. It also limited any possibility for student input. As well, the teachers' traditional, product-oriented approach to home economics and technical studies took priority over concerns about the division of labour, and inhibited their ability to explore other ways of teaching about domestic and technical work.

In addition, the teachers constructed students' behaviour in biological and psychological discourse and through culture rather than in terms of power, dominance and exclusion. The teachers' discourse had the effect of excusing, hiding, or trivializing the offensive behaviour of the dominant boys. An ideology of liberalism and individualism based in Western culture underplays the social construction of behaviour, and overplays the role of the individual.

Nevertheless, the teachers talked about what they might do differently. Although their ideas and their practice

were tempered by the social conditions of their work, teachers talked about how they might deal more effectively with the gender relations in their classrooms, how they might work collectively with other teachers, how they might incorporate diversity among students, and have more student input in the curriculum. The observation protocols provided a catalyst for re-thinking classroom practice. Bringing the voices of students to teachers through research opened possibilities for pedagogical change.

CHAPTER 7

THE SOCIAL CONSTRUCTION OF GENDER IN COEDUCATIONAL HOME ECONOMICS AND TECHNICAL STUDIES CLASSROOMS

In attempting to understand how gender relations are organized in coeducational home economics and technical studies classrooms, I have described students' responses to the program, the organization of social relations among students, and teachers' interpretations of life in their classrooms. In this chapter I will try to make sense of what is happening by relating my findings to other studies, and theorize a little on how the data should be interpreted.

To better understand gender relations it is necessary to think of gender not in terms of individual practices, but as collective, institutionalized social practices that reinforce the domination of men over women, and over men who do not support such practices. There is a sense of "custom," "routine," and "repetition," culminating in "cyclical rather than divergent practices" (Connell, 1987, p. 139). Feminist theorists have named the concept of an institutionalized system of gender inequality, "patriarchy," and they have identified the structures that keep a patriarchal system in place.

Some feminist theorists privilege one feature of patriarchy over another, while others consider a variety of patriarchal structures. For example, radical feminists focus on sexuality (Rich, 1986) and violence (Brownmiller,

1976); socialist feminists focus on housework (Oakley, 1974) and waged work (Hartman, 1979). Sylvia Walby (1990) argues that there are six key, interacting, patriarchal structures: paid work, housework, sexuality, culture, violence, and the state. But Walby warns that "gender relations are not static," and the idea of patriarchy "does not necessarily give rise to fixed ahistoric analysis" (p. 200).

The work of sociologist Robert Connell (1987) also is useful in understanding patriarchal structures. Connell argues that "labour," "power," and "the patterning of object-choice, desire and desirability and the production of heterosexuality and homosexuality" are "the major structures of the field of gender relations" (p. 97). He says they "are discoverable in current gender research and sexual politics...and account for most of the structural dynamics currently understood" (p. 97).

I shall examine the patriarchal structures of division of labour, violence, and sexuality. These were the features of patriarchy most evident in the present study. The three are related, but are useful devices for organizing this chapter. In so doing, I will attempt to bring together arguments about patriarchal structures with discourse analysis. I will show how the division of labour, violence, and sexuality are reflected in, and produced by, students' and teachers' gender ideologies and classroom practices, and through discourse.

Discourse analysis looks at the relationship between power and language. In writing about discourse analysis, Black and Coward (In Lees, 1986) write: "It is to insist that language has a material existence. It defines our possibilities and limitations, it constitutes our subjectivities" (p. 158). This means looking beyond what is said in terms of providing explanations of practices, to looking at how the discourse itself produces patriarchal structures.

In analyzing discourse, I rely mainly on the work of Sue Lees (1986) and Valerie Walkerdine (1990). Lees and Walkerdine illustrate how conventional discourse is an instrument of patriarchal domination, producing traditional gender relations. Lees' work is helpful in understanding how discourse around sexuality exerts control over adolescent girls. Walkerdine's work is useful in understanding how students hold various positions of power in relation to their positions in the discourse.

Lynne Segal (1990) argues that a combination of discourse analysis and exploration of patriarchal structures is an appropriate strategy. She writes:

I would argue for the importance of a form of realism wherein we must analyse the structures which generate the discourses and practices of phallogentrism and male power - while accepting that these structures cannot be identified independently of the way they manifest themselves in discourse....Once we ask what social processes underlie gender relations and representations, we must move toward a complex integration of psychoanalytic accounts of family dynamics and unconscious motivations, on the one hand,

and sociological analysis of social structures, practices and relationships, on the other. (p. 94)

Division of Labour

Some feminist theorists argue that the sexual division of labour is the major patriarchal structure. Despite women's increased participation in waged work, women remain primarily responsible for domestic work and child care. Since most men benefit from women's domestic labour, and because "women's work" is valued less than "men's work," the household is seen as a site of women's oppression (Chafetz, 1990). Further, women in heterosexual relationships, confined to the home, become reliant on men for economic survival. In her classic article, Heidi Hartman (1981) argues that a cycle is maintained when women try to gain access to waged work. They are denied access to higher waged work due to their lack of skills and experience, and because men control organizations, including unions, and deny women access to training and promotion.

Black feminist, bell hooks (1984), however, provides a necessary correction to the views of white feminists. She argues that, for black women, the household is more likely to be a site of refuge from the drudgery of the work available to women in a racist and sexist labour market.

In talking about waged work, Walby (1990) distinguishes between strategies of segregation and exclusion. Walby includes the strategies of exclusion identified by Hartman

(1981), but she adds sexuality, violence, and the role of the state. In addition, Walby argues that while strategies of exclusion prevent women's access to "men's" jobs, when women do enter paid work, strategies of segregation separate women's work from men's work and devalue what women do. Walby argues that "the explanation of occupational segregation is critical to the explanation of gender inequality in paid work" (p. 57).

Similarly, Connell describes the sexual division of labour as not only "the allocation of particular kinds of work to particular categories of people" (p. 99), but also "the nature and organization of that work" (p. 102), and the "distribution of the products of work - that is, the distribution of services and income" (p. 102). He argues that the "sexual division of labour" is "part of a larger pattern, a gender-structured system of production, consumption, and distribution" (p. 103).

In this study the sexual division of labour was maintained through students' ideologies about "women's work" and "men's work," and through practices that exclude women and men from non-traditional work. In addition, classroom discourse produced the division of labour by giving power to those who possessed knowledge in domestic or technical work, and denying it to others.

The students held traditional beliefs about who can do domestic and technical work. Most students felt that girls

and women were better at domestic work than boys and men. Some girls talked about technical work being too dangerous and beyond their capabilities. Students said this even though both girls and boys were equally engaged in domestic and technical work in the classroom.

But the students did not simply reproduce oppressive structures. The students' beliefs about who can do domestic and technical work were tied to their gendered experiences outside of the classroom. Most girls came to the classroom with more experiences than boys in domestic work; most boys had more experiences than girls in technical work. Students also were influenced by the division of labour in their own families and their own life experiences. For example, some of the girls I spoke with did not envision men doing domestic work and child care, and did not trust men with the care of children. My conversation with these girls reminds me of Jane Gaskell's (1992) comments about girls' career choices:

They knew for their own good reasons what the world was like, and their experience acted as a filter through which any new message was tested, confirmed, rejected, challenged and reinterpreted. Changing their minds would have meant changing the world they experienced, not simply convincing them of the desirability of a new set of ideals about equality of opportunity and of a different world. (p. 52)

The students' responses show the power of daily experience over what goes on in classrooms and the strength of students' stereotyped notions about women and men.

As well, the reproduction of traditional gender relations was not straightforward, or without contradiction. While the girls ridiculed or corrected other girls and boys who did not do domestic work "correctly," they showed annoyance with each other for being too fastidious. While some girls displayed skills in technical work, they feigned helplessness and encouraged boys to do their technical work for them. While the dominant boys chastised other boys who had difficulty doing domestic work, they ridiculed those boys who showed exceptional skills in this area. And dominant and less dominant boys worked hard at maintaining notions of their competence and girls' incompetence in technical work. The students' practices illustrate how they actively produced the sexual division of labour.

The teachers also were implicated in the sexual division of labour. While the coeducational home economics and technical studies program was intended to break down the sexual division of labour, most of the teachers did not engage students in discussion about gender and social issues surrounding domestic and technical work. The teachers assumed that having students do non-traditional work was sufficient to change students' stereotyped beliefs about who can do and who should be doing domestic and technical work.

As well, a lack of opportunity to reflect on their practice, as well as time constraints and the desire to keep students working at the same pace, forced teachers into

adopting teaching strategies that tended to reinforce gender inequality. By constantly correcting boys in the domestic setting, a home economics teacher may have contributed to the notion that boys cannot do domestic work. And by asking boys to help girls, by doing girls' work for them, by using male experiences to illustrate their teaching, and by not relating to girls' gendered experiences in technical work, technical studies teachers may have contributed to the notion that girls cannot do technical work and that technical studies is a male domain. Although the intention was to help students develop competence in domestic and technical work, these teaching strategies supported the division of labour.

The gendered history of each subject area no doubt played a part in the sexual division of labour. In home economics, sexual harassment distanced the dominant boys from the domestic nature of the course, from girls in the class, and also from their teachers, because they were women. The girls, on the other hand, may have supported the home economics teachers because they were women, and complied with domesticity because it has traditionally been associated with "women's work."

In technical studies, the boys may have complied with their teachers because they were men, and with technical work because it has traditionally been associated with "men's work." Boys may have restricted girls' access to

equipment and machinery, not only to emphasize their own skills in technical work but also to identify technical work with men rather than women. In contrast, girls distancing themselves from technical work may have given them power to challenge their technical studies teachers. Ultimately, although there were contradictions, girls, boys, and the teachers complied with the division of labour and the subordination of other forms of femininity or masculinity that might challenge this patriarchal structure.

The students' and teachers' complicity in the sexual division of labour ultimately tied them to what Kessler et al. (1985) and Connell (1987) describe as emphasized femininity and hegemonic masculinity. Emphasized femininity is defined around women's compliance with their subordination, and is necessary for the continuance of men's dominance over women. Connell (1987), however, identifies at least three levels of masculinities: hegemonic masculinity, conservative masculinities, and subordinated masculinities. I would argue that hegemonic masculinity was evident in the dominant boys' collective subordination of girls and women; less dominant boys and male teachers complied, and boys who did not were subordinated. Further, boys being domestic does not detract from hegemonic masculinity. On the contrary, as Connell argues, such a mix illustrates the complexity of gender relations and is

necessary for the institutionalization of men's dominance over women.

From a psychoanalytic perspective, the students' and teachers' discursive practices can be understood as an instance of what Walkerdine (1990) describes as the power/knowledge couplet. From this reading of students' and teachers' discursive practices those who are privy to a particular discourse wield power over others, and in so doing construct the others' subjectivities.

In a study of gender relations among nursery school children, Walkerdine (1990) found that girls were "constantly struggling with the boys to define their play and to redefine it into discursive practices in which they [could] be powerful" (p. 20). She observed a "multiplicity of contradictory positions of power and resistance" (p. 20). Walkerdine acknowledges, however, that girls do not "take up any position in any discourse" (p. 24). Walkerdine contends that "individuals are powerless or powerful depending upon which discursive practice they enter as subject" (p. 20).

In the present study, girls were familiar with the language of food and clothing. Unlike boys, the girls did not need to ask "What's knead?" "What's press?" This language was already part of their experience. The girls were able to use their knowledge to exert power when playing out domestic scenes, thereby constructing others as powerless. Girls' power, however, had a double edge - it

constructed women as domestic and ultimately confined them to domesticity and economic dependency.

The power/knowledge relationship was most apparent to me in technical studies. Because of my own gendered experiences, I felt excluded from the discourse of technical work, particularly in electronics. I would argue that the girls' comments about electronics as "boring" are likely an indication of their similar sense of exclusion from technical work. The boys and teachers who were already familiar with the language of technical work were able to exercise power in this area and in so doing constructed others as powerless, thereby reinforcing women's exclusion from technical work.

Thus, the sexual division of labour was not simply reproduced in the classroom. Students and teachers actively produced traditional gender relations. Hegemony was not complete, however. Students and teachers had to constantly reassert their positions, resulting in a complex combination of accommodation, resistance, and contradiction. In addition, students' and teachers' discourse not only reflected traditional notions of femininity and masculinity, but also was mediated by their subjectivities as women and men. Students and teachers held various positions of power in relation to their positions in the discourse, further contributing to the division of labour.

Violence

Once accepted as an individual act of force or oppression, violence against women is now viewed by many feminist and social theorists as a patriarchal structure. When viewed as a continuum, violence against women manifests itself in experiences ranging from intrusive staring to derogatory comments, sexual harassment, rape, incest, battery, and murder (Walby, 1990).

Segal (1990) and Connell (1987) allow for differences among men in their complicity in violence against women. Lynne Segal says that attention should be given to exploring different types of violent acts and different types of violent men. She writes: "Rather than ignoring these differences, the endeavour to understand them seems to me crucial to tackling the problems of violence and to provide the appropriate variety of solutions to prevent men from resorting to them" (p. 245). Connell, however, argues that individual acts of force or oppression are "deeply embedded in power inequalities and ideologies of male supremacy" (p. 107). He says that we need to look beyond individual acts of oppression to "a structure of power, a set of social relations with some scope and permanence" (p. 107). I would argue that violence against women cuts across the society and serves as a form of social control, though not necessarily in the same way, over all women.

Of course, the sexist, racist, and homophobic practices of the dominant boys in this study hardly compare with the cases of sexual harassment, brutality, and murder of women and minorities that one reads about every day in Canadian newspapers. Nevertheless, I would argue that the dominant boys' practices of correcting, interrupting, ridiculing, and harassing girls, less dominant boys, and woman teachers, and the sexual objectification of women, derogatory comments about homosexuals, and physical violence or the threat of it, promote violence against women and must be taken seriously. Further, I suggest that the dominant boys' practices are not acts of individual deviance. Rather, they are an enforcement of a gendered social order, from which all men benefit.

But counter-hegemonic forces were also evident. First, all boys were not implicated to the same extent. Although some of the less dominant boys complied with the dominant boys' behaviour, other less dominant boys withdrew in silence. This finding is an example of what Connell (1987) is talking about when he describes the "construction of hierarchies of authority" (p. 109), within the major categories of gender. Connell says that gender-based hierarchies among men are necessary for the subordination of women.

Second, although most often girls were silenced, a finding that agrees with the literature on girls' and

women's experiences in mixed sex groups (Lewis & Simon, 1986; Rich, 1979; Spender, 1980, 1982), I would suggest that girls' silence is not necessarily an indication of their subordination. As Rich (1979) states, girls' separation, as a group, from boys may be a form of resistance to patriarchy. Also, girls may have been avoiding the verbal abuse that they would inevitably receive from the dominant boys by speaking out. Regrettably, my interviews with the girls did not shed further light on this debate.

Third, some girls did speak out in the classroom. As Magda Lewis (Lewis & Simon, 1986) says, "a woman speaking is itself a political act" (p. 460). When girls spoke out they occasionally drew a collective, supportive response from other girls. Whether girls spoke out individually or collectively they were usually ridiculed by the dominant boys. The dominant boys' response is indicative of what Lewis is talking about when she says:

The very act or intention of speaking becomes an intrusion and a potential basis for a violent reaction on the part of those who have decreed our silence. Ultimately for individuals who transgress the limits of patriarchy, the forces of regulation are without a doubt swift, sure, and relentless. (Lewis & Simon, 1986, p. 460)

And fourth, all girls did not respond passively to the dominant boys' remarks. Some girls shouted abusive remarks at the boys. But, the girls' comments paralleled boys' derogatory comments towards girls. Lewis described a

similar response by women students in university classrooms.

I agree with Lewis when she writes:

Women have found legitimation only to the extent that we have been able to appropriate the male agenda, a particularly self-violating form of escape from domination which in the end turns out to be no escape at all. (Lewis & Simon, 1986, p. 462)

The issue of speaking out is clearly complex. I would agree with Walkerdine (1990), who argues that speaking out is not about finding a voice, rather it is about finding a place and having the power to speak. She writes:

The issue of silence and speaking is not a simple matter of presence or absence, a suppression versus an enabling. Rather, what is important is not whether one is or is not allowed to speak, since speaking is always about saying something. In this sense what can be spoken, how, and in what circumstances, is important. It not only tells us about its obverse, what is left out, but also directs attention to how particular forms of language, supporting particular notions of truth, come to be produced. This provides a framework for examining how speaking and silence, and the production of language itself, become objects of regulation. (p. 31)

Notwithstanding, in interviews, some girls excused boys' misogynist practices, and some girls blamed other girls for boys' responses. This finding agrees with Lees' (1986) description of adolescent girls' responses to boys' behaviour. Lees writes: "The boy is not criticized for his behaviour: his chauvinism is regarded as 'natural' or something that is unalterable" (p. 79).

As well, some girls told me that they were not bothered by the dominant boys' comments. They spoke as if the boys' behaviour did not constrain their being as young women.

While the girls' responses may be considered to be a form of resistance, I think that the girls' refusal to admit, publicly, to their subordination may have been a protective mechanism. As Lewis (1989) says, feminist pedagogy must address "the threat to women's survival and livelihood that a critique of patriarchy (in its varied manifestations) poses" (p. 5). Following Patti Lather (1991), rather than assuming girls' false consciousness, I now realize that I should have pursued how the girls came to view the boys' actions as harmless.

Although time constraints, the business of classrooms, and concerns about safety and student evaluation prevented teachers from hearing classroom talk, the teachers also excused the boys' actions. They explained male violence in terms of culture, or individual psychological maldevelopment, or they said that it was a matter of fun and should not be taken seriously. In so doing, I would suggest that the woman teachers indirectly reinforced a subordinate position for girls and women, and man teachers reinforced a kind of masculinity that entails devaluing, silencing, and controlling women.

Walkerdine (1990) explains a similar response by woman teachers in her study as fitting with the discourse of "progressive education": a discourse that promotes the "natural" development of the child and expression rather

than repression of natural childhood sexuality. Walkerdine writes:

Its purpose is to produce better control through self control and that, ironically, is what helps to produce the space in the practice for the children to be powerful....Thus the very discourse helps to produce the children as powerful....Similarly the discourse of the naturalness of male sexuality to be expressed, not repressed, produces and facilitates in the teacher, collusion in her own oppression, since, if she reads actions as normal and natural, and suppression of these actions as harmful, she is forced into a no-choice situation. She cannot but allow them to continue, and she must render harmless their power over her. (p. 8)

Similarly, in this study, the teachers' discourse constructed the boys as harmless, and violence against women continued unabated.

It is possible that the dominant boys' responsiveness provided intrinsic rewards for teachers. As one teacher told me "the boys are fun to interact with - the girls are very quiet, except for Jennifer" [2-5(9)]. Similarly, in response to teachers who described boys' violence as mere "naughtiness," Walkerdine (1990) writes: "Girls are, by and large, described as lacking the qualities that boys possess. They are no trouble, but then their lack of naughtiness is also a lack of spark, fire, brilliance" (p. 127). I would suggest that the dominant boys' enthusiasm was instrumental in causing the teachers in this study to construct the boys' actions as harmless, requiring that they downplay violence against women in their classrooms.

Thus, I would argue that the girls' and woman teachers' responses to violence against women cannot be understood in

terms of a straightforward compliance with or resistance to their subordination. Their response needs to be understood as a response to their subjectivities as women.

Sexuality

Understanding sexuality as a patriarchal structure requires seeing it not as a biological drive, but as a social construction. Further, as a social construction sexuality is not merely a set of individual interactions. Rather, it exhibits taken-for-granted, overarching patterns of gender inequality (Walby, 1990). From this perspective, sexuality is linked with women's subordination under patriarchy.

Radical feminists have given most attention to the primacy of sexuality as a force of women's oppression (Dworkin, 1981; MacKinnon, 1982; Rich, 1986). More specifically, some view heterosexuality as a central organizing principle of patriarchy. The argument is that through heterosexual relations women become subordinated - they service men and become sexualized objects of men's desire. In her classic piece "Compulsory Heterosexuality and Lesbian Existence," Adrienne Rich (1986) writes: "This assumption of female heterosexuality seems to me in itself remarkable: It is an enormous assumption to have glided so silently into the foundations of our thought" (p. 34). Rich's comment serves as a reminder that the social

construction of sexuality and gender inequality are inescapably intertwined.

In this study, heterosexism was an overarching feature of gender relations. Students' classroom talk constructed students as heterosexual, and teachers' side talk with students, whether it was about teachers' personal lives, the school dance, "Valentine's Day," or students' home lives assumed a heterosexual existence. I agree with Connell (1987) when he says "[Education] is organized around the model of the heterosexual couple [and] reflects the dominance of heterosexual interests and the subordination of homosexual people" (p. 117).

The dominant boys' homophobic talk further contributed to heterosexism, and to violence against women. The boys categorized anything, or anyone, they did not like as homosexual. Men who were deemed inadequate were equated with femininity and with homosexuality. Girls who were deemed inadequate were also equated with homosexuality, as were the boys with whom the girls associated. Connell (1987) argues that an important condition of hegemonic masculinity is that it is heterosexual. He says that "contempt for homosexuality and homosexual men...is an important feature of the ideological package of hegemonic masculinity" (p. 186).

The dominant boys' contempt for lesbians and gay men was paralleled by their apparent contempt for women. At the

same time, their constant sexual innuendos and their objectification of women's bodies had the effect of emphasizing the notion that men want sex with women at any cost. This contradiction suggests that men use women negatively to create a camaraderie among men and to protect against accusations of homosexuality, showing how heterosexism and misogyny are intertwined.

The girls' talk, on the other hand, emphasized romance, thereby supporting Rich's (1986) argument regarding compulsory heterosexuality. I would argue, however, that girls' holding of older men in reverence and surrounded in mystery is not a simple matter of girls' resistance to their subordination (McRobbie, 1981), or their conformity to the sexist climate of the school (Lees, 1986), for despite their ideologies of romance, the girls were under no illusions of the realities of heterosexual relationships. The girls talked about the difficulty of finding a male partner who did not physically abuse women and children, did not have a prison record, or had not dropped out of school. And the girls understood women's work in caring for children and other family members. I suggest that the girls' own experiences in families, and in part-time work, provided them with a more complete picture of everyday life than straightforward notions of resistance or conformity suggest.

How then are we to understand girls' fantasies?

Walkerdine (1990) suggests that girls' fantasies might be an

escape from their positioning in the discourse. She writes: "The fantasy is a fantasy of escape - from drudgery, the pain of being a woman, a mother, the pain of being working class" (p. 124). According to Walkerdine, the point is not to separate fantasy from reality, "but to demonstrate how fantasies themselves are lived, played out and worked through in their inscriptions in the veridicality of discourses and practices" (p. 141).

Similarly, boys' talk about sport and electronics can be understood as symbols of macho-masculinity, or as fantasy. Connell (1987), for example, writes about how "symbolic markers of social categories" (in this case sport and computers)... "get detached from their contexts and themselves become primary objects of arousal" (Connell, 1987, p. 115). Walkerdine (1990), however, warns against what she describes as middle-class readings of fantasies around sport. After watching a working-class family watching Rocky II, a film about boxing, Walkerdine writes:

Fighting is a key term in a discourse of powerlessness, of a constant struggle not to sink, to get rights, not to be pushed out. It is quite unlike the pathological object of a liberal anti-sexist discourse which would understand fighting as 'simply' macho violence and would substitute covert regulation and reasoning in language as less sexist. (p. 187)

Walkerdine is not excusing male aggression, but she is "against a universalism of meaning, reading and interpretation" (p. 187).

The dominant boys' misogynist talk can also be read in different ways. One way is to view boys' talk as a way of categorizing girls' behaviour. In labelling girls "lezzie," "dog," and "whore," the boys defined girls in terms of their sexuality and women's social behaviour was given sexual significance. Although Lees (1986) views animalistic categories as different from "slag" or "slut" categories, I think that they are similar. Categorizing a woman as a "dog" suggests that she is dirty, and has sex indiscriminately, as does the category "slag." As Lees points out there are no equivalent terms that girls can use against boys: "There are no words that amount to an attack on their whole personality or social identity" (p. 31).

At the same time, terms such as "slag" or "dog" might be viewed not so much as a description of girls' and women's actual behaviour, but rather as a "category of 'moral censure': as part of a discourse about behaviour departure" (Lees, 1986, p. 160). For example, girls who spoke out in the classroom, or girls who drew attention to their bodies through fashionable clothing, or girls who did not conform to male requirements for women's clothing, such as tight jeans, were likely to be identified with animals or prostitutes. As well, because both girls and boys said that "cow" meant a fat person, their calling girls and women "cow" suggests a symbolic regulation of women's bodies. As Lees points out, such categories provide "an ever present

force, censoring and constraining behaviour irrespective of the presence or absence of boys" (p. 82).

The complexity of discourse around sexuality as a constraining force was complicated by girls' occasional use of sexist terms to categorize girls and women. As well, girls and women teachers excused the dominant boys' talk, failing to acknowledge the derogation of women and the constraints placed on their behaviour when they are defined in terms of their sexuality. I would agree with Lees' (1986), who says:

The language of slag is not exercised by boys over girls, rather both sexes inhabit a world structured by the language quite irrespective of who speaks to or about whom. The double standard of morality is so embedded in language and in the conceptions of masculinity and femininity that girls rarely contest them. (p. 160)

Thus, sexuality as a patriarchal structure was reflected in the gender relations of the classroom. Again, students did not merely reproduce this patriarchal structure. Rather, they actively produced traditional gender relations. Although there was little resistance and contestation, students did produce traditional gender relations in contradictory ways. Despite the homosocial character of the dominant boys' relationships as a group and their apparent interest in heterosexual relations, they exhibited extreme homophobia and contempt for women. Despite girls' understandings of heterosexual relations, they held older men in reverence and romanced about them.

At the same time, the production of sexuality was mediated through students' subjectivities as women and as men in various class and gender positions.

The patriarchal structures of division of labour, violence against women, and sexuality were reflected in the gender relations in the classrooms studied. I do not wish to suggest, however, that these structures operated independently. They interwove and intersected in complex ways. For example, violence against women was evident as a tool of exclusion and segregation in the division of labour, and in the construction of a homosocial, heterosexist camaraderie among the dominant boys.

As well, school organization operated across the patriarchal structures of division of labour, violence against women, and sexuality. The isolation of teachers and the intensification of their work, their additional responsibilities such as curriculum development, student evaluation, and classroom safety, and the ever present threat of subject erosion and job security, precluded attention to gender relations in the classroom.

In addition, I do not want to suggest that gender inequality operated independently of other forms of oppression. Rita and Jennifer were both "white," from so-called "majority" backgrounds, and they provided the greatest challenge to the division of labour and violence against women. Although other dimensions such as class may

also have played a part, and other "white" girls along with girls from so-called "minority" backgrounds, were also silenced, Rita's and Jennifer's "whiteness" was to me the most striking feature in their resistance to patriarchal dominance. Similarly, Anthony, the only First Nations student in the classroom, exhibited the most anger and aggression, showing possibly how the social construction of masculinity intertwines with the experiences of belonging to a so-called "minority" group. Unlike dominant boys, however, Anthony's anger was directed more at society generally than it was towards girls and woman teachers. I regret that no more than token words can be said on this issue, but I recognize that my own "whiteness" and dominance may have prevented me from being sensitive to the complexity of gender relations in the classroom.

Nevertheless, the findings of this study challenge the view that girls and boys merely reproduce traditional gender categories. Variation within categories was clearly evident, as was the part that students and teachers played in building patriarchal structures. Male dominance was never complete, and girls did not passively accept their subordination. Students struggled to construct traditional gender relations and there were many contradictions.

The patriarchal structures of division of labour, violence against women, and sexuality manifested themselves in discourse. Classroom discourse illustrates how the

social construction of femininities and masculinities must also be understood in relation to students' subjective positionings. Thus language was also a system of power that defines and limits not only individual subjectivities, but ultimately gender relations.

CHAPTER 8

CONCLUSION

This study has explored the production of gender relations in a specific coeducational setting - a combined home economics and technical studies program in an inner-city secondary school. In investigating this relatively unexplored subject area, the study is a contribution to a growing literature on the relationship between schooling and gender inequality. In this chapter, I review the major findings of the study and discuss some of the implications for theory, policy, research, curriculum, and classroom pedagogy.

The chapter is not meant to be prescriptive. Although I have carefully worked toward the criteria for validity discussed in chapter 3, this study is not about capturing "truth." While I have attempted to accurately re-present what I heard and what I saw, the interpretation is filtered through my own subjectivity. There will necessarily be gaps and inconsistencies and the dissertation itself will no doubt produce women as other, as I too am implicated in relations of power. In keeping with this approach to social science research, I do not claim to provide answers. Rather, I offer the following comments as a contribution to the ongoing debate about gender inequality in education.

The study raises questions about the adequacy of coeducation as a response to gender inequality in schooling.

For me there are three major areas of concern. First, the coeducational program provided further space for the subordination of women and other minority groups. A small group of boys dominated student-teacher interaction, and they abused girls, less powerful boys, and their woman teachers. Not only did the dominant boys' talk overtly violate women, their discursive practices also positioned women as objects of regulation. As Valerie Walkerdine (1990) points out "Power exists in the apparatuses of regulation" (p. 42), not simply in the individual.

In what could be described as "an interesting transformation of power" (Walkerdine, 1990, p. 24), teachers explained the boys' dominance in biological or psychological discourse and through culture, or as something that should not be taken seriously. The teachers' institutional discourse thus produced the boys' actions as harmless and further positioned students in relations of power and powerlessness.

Second, coeducation did not provide an equal education for girls and boys. Granting space to girls in technical studies, and to boys in home economics, was not paralleled with a sensitivity to students' interests and ways of knowing based on their previous gendered experiences. Rather, the home economics and technical studies program was organized around the teachers' perceptions of the students' needs and interests. Technical studies teachers' treating

students "the same" meant catering to the perceived interests and experiences of boys. Home economics teachers' sensitivity to their perceptions of boys' needs and interests in a non-traditional area, undermined most girls and some boys who already had previous experience in domestic work. The home economics and technical studies teachers' authoritarian, product oriented approach also neglected those interested in different ways of knowing, most of whom were girls. The program thus privileged most boys and left most girls marginalized.

In denying differences among students, the program not only disadvantaged girls, and some boys, intellectually, it also further produced their subjectivities. In particular, the institutional discourse of the importance of treating students "the same" is a liberal discourse of meritocracy. The discourse cannot avoid producing girls as Other because it ignores gender inequality. In this way, "fictions" of equality of opportunity are built into the structure of schooling. As Carmen Luke (1992) points out:

It is those epistemic gendered dualisms and oppositions that can guarantee equality at the level of anti-sexist legislative tactics while guaranteeing the continuation of unequal positioning and power, even when women are admitted to the public. (p. 32)

Third, requiring girls and boys to engage in domestic and technical work did not challenge the sexual division of labour. Although students learned skills that were new to them, the coeducational program did not change students'

minds about who can do this work, nor did it change their notions about the value assigned to each area. Students brought their previous beliefs about, and experiences in, domestic and technical work to the classroom with them and these had a powerful effect. And, in all but one section, the teachers' product oriented approach left the students' beliefs about the division of labour unchallenged.

Students' previous experiences in domestic and technical work positioned them in a discourse that further constructed their subjectivities. The discourse of the girls, boys and teachers constructed the girls as "powerless" in technical work. And, while girls' exerted power in the domestic setting, their discourse confined them to domesticity and economic dependency. Power was a shifting relation, depending on the students' positioning in the discourse.

These three areas of concern about coeducation as a response to gender inequality, reveal a major contradiction in the program. Including boys in home economics and girls in technical studies was intended to help break down the division of labour and further gender equality. Yet, classroom practices supported the division of labour and women's subordination, and students' and teachers' discursive practices produced girls and women in subordinate positions. Clearly, adding boys to home economics and girls to technical studies does not deal with the complexity of

gender relations, nor does it present a serious challenge to patriarchal structures.

My concerns about coeducation should not be interpreted as an argument for single-sex schooling. Relations of power existed within as well as between sex groups, and patriarchal structures were reflected in single-sex as well as mixed-sex interactions. As Sue Lees (1986) points out, girls' and women's behaviour is regulated irrespective of the presence or absence of boys or men. Rather, my argument calls for a rethinking of the meaning of gender equity and a reappraisal of gender equity policies that deal only with issues of access.

This study has shown that gender equity means more than finding spaces for girls and boys in nontraditional areas. It also means attending to knowledge in the curriculum and gender relations in the classroom, and confronting the powerful institutional discourses that keep women and minorities marginalized. A curriculum based on the authority of the teacher, a curriculum that reflects white, male, middle-class, heterosexual interests, and a curriculum that takes a technical approach to human problems, reflects and reinforces the patriarchal structures of the wider society. As does a classroom environment where girls, and boys who do not support dominant practices, are ignored, silenced, and abused. As do the powerful institutional

discourses that excuse boys' practices, construct women as "other," and as objects of regulation and social control.

At the same time, more needs to be known about how to make curriculum and classroom pedagogy more gender sensitive. Talk about "women's ways of knowing" risks essentializing women's experiences, obliterating identities, and further oppressing minority groups. And the emphasis on finding places for women to speak, risks neglecting the importance of having men question their own privilege and positioning. We need to know more about how teachers come to understand the development of young people, and we need to find ways of challenging the dominant discourses. Much work is needed to better understand the relation between gender inequality, curriculum, and classroom practice.

My concerns about what happened in these coeducational classrooms should not be read as teacher-blaming. Teachers are equally trapped in patriarchal structures and their classrooms are sites of the larger social processes of gender relations. As Kathleen Weiler (1988) says: "Schools are not isolated from the dynamics of the wider society; quite the contrary, they magnify the contradictions and tensions of a society so marked by inequality and oppression" (p. 148).

Teachers' practices must also be understood in relation to the gender and class politics of schools, and the conditions of teachers' work. As Jane Roland Martin (1981)

points out, school systems place little value on knowledge for the private sphere. And, schools have traditionally delegated technical education as a priority only for non-academic students (Goodson, 1983). Inclusion of girls and boys in home economics and technical studies did not result in more time being given to these areas: what it meant was less time and more students. As a result, teachers' workloads increased, curriculum content and pedagogy became standardized and fragmented, there was little opportunity for teachers to work collaboratively, and teachers had little time to devote to gender relations in their classrooms. Clearly, if schools are serious about working towards gender equity, the organization of schooling and the conditions of teachers' work needs attention.

Nevertheless, the study raises questions about the role of schooling in changing traditional gender relations. Students and teachers did not simply passively reproduce traditional gender categories. Rather, they were actively engaged in the production of gender relations. And although students and teachers ultimately engaged in the reproduction rather than the transformation of traditional gender relations, there were divisions within gender categories and their practices were riddled with contradictions. As Connell et al. (1981) state: "Contradictions and incoherencies...can make space for different practices" (p. 115). As well, although girls exerted power in the

domestic setting, further confining them to domesticity and economic dependency, their demonstrations of authority show how power is a shifting relation. As Jane Gaskell (1992) says, "Life is not static; power is not a thing but a relation that is constantly negotiated" (p. 138).

Notwithstanding, further research in other schools is needed to provide a better understanding of how traditional gender relations are reproduced or transformed in coeducational home economics and technical studies settings. Also, it would be useful to explore the social construction of gender in other school subjects. In this regard, I would favour more collaborative kinds of research with teachers and students than was possible in the present study. Further, this study focused only on the patriarchal structures of division of labour, violence against women, and sexuality. More work is needed to develop the relationship between gender inequality in schooling and patriarchal structures.

While the dissertation has illustrated how the curriculum was based on white, middle-class, heterosexist assumptions, and it has exposed blatant incidences of sexism, racism, and heterosexism in the classroom, the intersection of gender, "race," ethnicity, social class, and sexual orientation needs to be further developed. Although I endeavoured to be sensitive to ethnicity, I was cautious about over-interpreting ethnic differences. And as a white,

heterosexual woman of privilege I was hesitant in exploring more subtle forms of racism and heterosexism with students. As well, the political climate constrained the kinds of questions I was able to ask of students and teachers. Nevertheless, we must find ways of exploring the experiences of students without causing them further violation. Understanding the intersection of gender with other forms of oppression in schools is a priority.

What can be done about the gendering that goes on in schools? What can be done to challenge patriarchal structures such as the sexual division of labour, violence against women, and sexuality? Is it possible to bring about change when working within a system that supports and proliferates dominant discourses and itself embodies male supremacy? If, as Connell (1987) says, practice can be turned back on itself, what would this look like in the classroom?

As I bring closure to this dissertation, feminist theorists are exploring the limits and possibilities of liberatory pedagogy. For example, Elizabeth Ellsworth (1989) says that classroom practice is "always partial, interested, and potentially oppressive to others" (p. 324); Valerie Walkerdine (1990) describes woman teachers caught in the ideal of "freeing" each individual student, as trapped in "bourgeois reality" and an "impossible fiction" (p. 21); and Carmen Luke (1992) argues that liberatory pedagogy may

be nothing other than "idealized liberalism" (p. 37). Luke writes:

The point is this: to grant equal time to female students, to democratize the classroom speech situation, and to encourage marginal groups to make public what is personal and private does not alter theoretically or practically those gendered structural divisions upon which liberal capitalism and its knowledge industries are based. Those very divisions have generated countless discourses of, strategies and pleas for "equalities" in the first place. The emancipatory strategy of the public confessional may both be an illusory reading of classroom gender politics and of students' 'critical' responses. (p. 37)

While these arguments are important ones, feminist theorists also point enthusiastically to the possibilities of feminist pedagogy. Sue Lees (1986), for example, argues that attention must be given to the language of sexism as this not only categorizes women, but it also acts as a force of regulation and social control. Here I would include not only the language of sexual abuse, but also the biological and psychological discourses that excuse misogynist practices. Lees acknowledges that to change the dominant discourse is difficult because it challenges basic assumptions about masculinity and femininity.

Linda Briskin (1990) calls for a pedagogy that empowers students through knowledge about oppressive societal structures and calls into question the gender relations of classrooms. She calls this an anti-sexist pedagogy towards gender equity. Briskin writes:

An anti-sexist strategy makes gender an issue in all classrooms in order to validate the experience of all

students, to bring it into consciousness and to challenge it. It makes gender an official rather than an unofficial factor in classroom process and curriculum; by extension an anti-sexist strategy takes up race, class, and sexual orientation, which interrelate in complex patterns with gender....Anti-sexism shifts the focus from the realm of morality (I am not sexist) to the realm of political practice (What can I do about sexism?). (p. 14)

And, Magda Lewis (1990) uses students' resistance to liberatory pedagogy to rethink feminist practice. She says that educators must acknowledge "the threat to women's survival and livelihood that a critique of patriarchy in its varied manifestations confronts" (p. 473). She further suggests that educators work at creating safe spaces in their classrooms, for all students, particularly women, and work with men so that they learn to question their own practices.

Further research is needed to find out how dominant discursive practices are challenged and transformed. We need to hear more stories about how educators in elementary and secondary schools have attempted to challenge the dominant discourses.

Thus attention to gender inequality involves more than a reorganization of home economics and technical studies programs to include boys and girls. As Adrienne Rich (1985) says, it means taking women students seriously. It means understanding the inequities that result when traditional power relations enter into our daily lives in classrooms. It means examining the taken-for-granted experiences we have

as boys and girls, women and men. It means recognizing the diversity of human experience, revaluing women's knowledge and women's work, and changing traditional ways of relating. Rather than ignoring, accepting, or excusing patriarchal practices, it means challenging dominant discourses and placing gender relations on the agenda in the classroom. There lies the challenge of feminist teaching. The work continues.

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