

**FACTORS INFLUENCING TRADITIONAL AND NON-TRADITIONAL
COOPERATIVE EDUCATION PLACEMENTS, BY GENDER,
FOR SECONDARY SCHOOL STUDENTS**

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ABSTRACT

This study explores the experiences of cooperative education students in traditional and non-traditional (by gender) cooperative education placements, and attempts to determine the factors which influenced their placement choice. A survey of 104 cooperative education students from 4 Northern Ontario high schools was completed. In addition 7 students in non-traditional placements were interviewed about their experiences. The results showed 93% of students were in cooperative education placements that were traditional for their gender. Female students were more likely to participate in non-traditional placements than male students. Most students identified personal interest as the reason for their placement choice. Both parents and peers were shown to influence the placement choices of students. This study concluded that cooperative education teachers need to encourage students who want to participate in non-traditional careers.

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CHAPTER 1

Introduction

Researchers have studied cooperative education programs in Ontario Schools since they first began in the early 1970's . The focus of research, especially the early work, was primarily to determine whether or not cooperative education programs provided a superior method of learning (Hughes & King, 1982; Stull, Crow & Braunstien, 1997; Van Gyn, Cutt, Loken & Ricks, 1996). Gender issues in cooperative education have become a research priority more recently. The experiences of females in non-traditional cooperative education placements have been of particular interest to many researchers (Ahola-Sidaway, McKinnon, Simser & Spletzer, 1996; Burge, 1990; McKinnon & Ahola-Sidaway, 1995; Scane & Staton, 1995).

In both the United States and Canada, policies exist for teachers and administrators to encourage students in non-traditional career exploration (Sandell & Burge, 1988; Ontario Ministry of Education, 1989). The end goals of these policies are to increase the future career options of all students and to move towards greater gender neutrality in careers. In fact, the number of males and females in non-traditional cooperative education placements has increased slightly in recent years, although females are much more likely to cross the barrier of career sex typing (Sandell & Burge, 1988; McKinnon & Ahola-Sidaway, 1995). In Ontario, sex equity within the cooperative education system is addressed specifically by the Ministry of Education (1989):

Educators must make a special effort to find ways of removing barriers to in-school studies and out-of-school placements that have traditionally been

considered the domain of men or of women. Every effort should be made to stimulate the participation of both female and male students in non-traditional occupational areas. (p.16)

Specific initiatives or strategies to encourage non-traditional cooperative education placements are not discussed within Ontario's Cooperative Education policy documents (Ontario Ministry of Education, 1989).

McKinnon (1995) describes a variety of initiatives used to encourage females into non-traditional careers at the secondary level including, non-traditional job fairs, mentoring programs, job shadowing, posters and videos. Scane and Stanton (1995) found that of Ontario's 163 School Boards 75 claimed that they "had successful programs encouraging girls to try non-traditional opportunities" (p.1). The researchers followed up on those claims and found that most of the boards defined success as a small number of females attempting non-traditional placements, or as those in non-traditional placements having an enjoyable experience. The authors concluded that the programs having greatest participation of females in non-traditional placements had some characteristics in common with each other. These programs specifically encouraged participation in non-traditional careers using more than one method to achieve that goal.

Research on the experiences of females in cooperative education has often concerned challenges facing females in non-traditional placements. McKinnon and Ahola-Sidaway (1995) discuss from a critical-feminist perspective the challenges facing woman in non-traditional work site placements. They identify several challenges women experience in these settings, including the physical constraints of tools that are not designed for their smaller bodies, less mechanical experience, verbal harassment and

feelings of isolation in the work place. One of the researchers' most important findings is that often women are "job niched" into the more feminine tasks in the work site. This means although they may have intended to try out a non-traditional career, the reality is they are still doing "women's work."

Research including the experiences of male students in non-traditional cooperative education placements is sparse (Burge, 1990). According to Burge, sex-role stereotyping and the domination of most careers by one gender is harmful to both females and males in our society. She argued that sex-role stereotyping is harmful to females because most jobs that are traditionally dominated by females are low paying and lack prestige. Many of these undervalued "feminine" jobs are important to the well being of society (e.g. nursing and daycare). Sex stereotyping is also harmful to males. For example, jobs that involve nurturing or aesthetics are labelled as feminine. These jobs may appeal to some men who would find the work enjoyable and satisfying. Irrespective of job satisfaction, most men would find it difficult to enter "feminine" careers which represent a step down in both pay and prestige.

Although females are now often encouraged to "shed stereotypes" and to work in non-traditional careers, the same cannot be said of males (Murray, 1999). Murray cautions that boys are being "emotionally mis-educated" by their parents, peers and the media to maintain a tough demeanor. She points out that some psychologists blame recent violence in schools on the pressure boys experience to be "tough." Burge (1990) claims, for a male, choosing a job that is traditionally dominated by females can mean that his masculinity will be questioned. One consequence is that many talented men continue

not to choose these non-traditional professions.

Although much research has been done in the field of cooperative education, very little exists about why students in non-traditional cooperative education experiences choose the placements that they do (Sandell & Burge, 1988). Comparisons of the reasons students in non-traditional placements choose the placements they do and how their peers in traditional placements make their choices have been neglected. As well, the experiences of males and females in non-traditional placements need to be studied in a similar manner. The study of students at the secondary level who have made non-traditional placement choices may give greater insight into the factors that have contributed to their decisions. By studying factors which influence the choice of non-traditional cooperative education placements it may be possible to identify strategies likely to encourage their participation in non-traditional careers.

Purpose of the Study

This study explores the experiences of cooperative education students from several Northern Ontario high schools. It was designed to determine the factors which influenced the students' placement decisions. The focus of the study was the reasons why students in non-traditional (by gender) placements choose their placements. However, all of the students were asked about factors which may have influenced their placement choice, whether traditional or non-traditional. The study employs both qualitative and quantitative instruments (survey and interview components). The data from the survey were analysed to determine the factors which were most influential in the students' decision-making process.

The decision to leave the regular classroom setting for a cooperative education placement represents a significant change in the daily lives of a student. The students in a cooperative education placement leave an environment dominated by their peers and a teacher to spend time in a placement setting which is likely to be dominated by adults. This transition to the world of work is in some cases the first step in the career decision-making process. Further, the decision to enter into a non-traditional placement is even more significant. Not only is the student leaving a social environment dominated by their peers, they are entering an environment where the majority of the people they will be working with are of the opposite sex. This study aimed to describe and discuss the nature of this transition in the context of traditional and non-traditional cooperative education placement experiences.

Significance of the Study

The significance of this study is primarily related to the following:

1. Research concerning the experiences of students in non-traditional cooperative education placements is limited. Existing research focuses on the experiences of females in non-traditional placements. An examination of the experiences of males in non-traditional placements would be valuable.
2. Research that identifies the influences on students when choosing cooperative education placement choices is limited.
3. The results of this study may have implications for the curriculum of cooperative education programs in Ontario.

Terms Defined

Cooperative education: The Ontario Ministry of Education (1989) explains that cooperative education is a method of learning that “integrates academic study and classroom theory with learning experiences at a placement site” (p. 3.). Students earn high school credits for both the in-school and out-of-school portions of cooperative education.

Non-traditional career: A career pursued by an individual even though that occupation has been strongly associated with and dominated by the opposite sex. For example, when a female chooses a career which has been traditionally associated with males (eg. mechanics, engineering); or when a male chooses a career which has been traditionally associated with females (eg. nursing, secretarial) (Auster & Auster, 1981).

Placement: The location of the out-of-school or work experience portion of the cooperative education program (Ontario Ministry of Education, 1989).

Sex-role stereotypes: A fixed perception as to the individual roles available to each gender in our society which limits the of the types of careers deemed suitable for each gender (Burge, 1990).

CHAPTER 2

Literature Review

In order to discuss influences on adolescent-decision making, it was important to begin by addressing how children become socialized and what factors influence the development of their personalities. Traditional theory has emphasized the role of the family and the home environment in the formation of a child's personality. The idea that parents had a primary role in the development of their children was largely unchallenged until recently. Harris (1995) inquired: "Do parents have any important long-term effects on the development of their child's personality?" (p. 458) and perhaps surprisingly, concluded that the answer was 'no' or 'at least very little.' Harris proposed a group socialization theory of development (GS theory) which postulated that a child's peer group was responsible for the modification of a child's personality outside the home. Personalities include attitudes and values which are likely to influence job choice, therefore GS theory has implications for developmental processes such as career exploration in adolescence.

Group Socialization

The group socialization theory of development proposed by Harris (1995) examined evidence from behavioural genetics together with sociological and psychological research relating to socialization in childhood and adolescence. She accepted that heredity accounts for "about 50% of personality variances" (p. 458) and that much of the remaining variance cannot satisfactorily be explained by factors within the home environment. Although Harris conceded that within the family child rearing

differences do exist, she concluded that it impossible to distinguish cause from effect (p. 461). For example, it cannot be determined if a child is more sociable because parents act favourably toward that child, or if parents act favourably to a child that is sociable by temperament. Harris (1995) concluded that:

...data from birth-order studies and from studies of children with and without siblings cast serious doubt on the hypothesis that children's within-family micro-environments play a causal role in the shaping of their personalities. It is time to look elsewhere. (p. 461)

Harris (1995) built her case for GS theory by first explaining how group socialization occurs. "Humans can belong simultaneously to many groups and can shift their allegiance from one to the other, without moving an inch, in response to changes in relative salience" (p. 465). She identified four predispositions that affect interactions between group members and between groups:

The first is group affiliation, the basis of in-group favouritism. The second is fear of, or hostility to, strangers, which joins with in-group favouritism to produce out-group hostility. The third is within-group jockeying for status. Improving one's status within a group brings greater access to scarce resources. The fourth causes us to seek, and enables us to form, close dyadic relationships (p. 466).

Humans rely on certain cues to divide themselves into groups, and the three most important cues according to Harris are sex, age and race. During childhood the primary distinction that children make is gender. Although race distinctions are not made until preschool age, children make age and sex distinctions as infants. Modern schools foster age-segregated groups by separating students into grades by age. Children separate into sex-segregated groups without any encouragement from adults. At lunch time there would be girls' tables and boys' tables. On the playground there would be separate boys'

and girls' activities. Harris (1995) noted that an exception to this phenomenon occurred in small groups. Children in small groups have a much greater tendency to mix, rather than separate into age, gender or racial subgroups (p. 466).

The sex segregation that occurs during middle childhood causes the differences between boys' and girls' to become greater. As evidence, Harris pointed out that the differences in boys' and girls' behaviour is more pronounced when they play in sex-segregated groups than when observed playing individually. As children reach adolescence, Harris argued that the sex segregation of groups breaks down and athletic, social, or academic interests and abilities become defining characteristics of groups. Although adolescents socialize in mixed-sex groups, gender continues to be a defining variable in human behaviour and remains such across the lifespan. Gender has a significant influence on career exploration and career choice.

Developing Career Aspirations

Consistent with the work of Harris, in a study regarding the origins of children's career aspirations, Trice, Hughes, Odom, Woods & McClellan (1995) cited an earlier work of their own (1992), contradicting the assumption that parents have a strong influence on children's career choice. The authors asked elementary children: "Has anyone ever told you that when you grow up you should be something or that you would be good at something?" (p. 308). The authors found less than 10% of the sample could recall parental suggestions. Of those children for whom their parents had made career suggestions, the children themselves did not report those suggestions among their personal career choices. However, the authors noted two earlier studies showing that

children were more likely to aspire to the careers of their parents (Holland, 1962; Werts & Watley, 1972, p.309). Trice et al. (1995) explained that parental influence tended to decline with age (p. 308).

Trice et al. (1995) also supported the theory that children's interests are the most important factor for selecting and rejecting occupations (p. 320). As children grow up their career aspirations begin to change. As adolescence is approached, fantasy type career choices are abandoned (e.g. professional wrestler) in favour of reality-based careers. Family structure was found to be associated with "career indecision," but it did not significantly contribute toward any particular career choice (p. 320).

Transition from School to Work

There has been a continuing debate over the role of schools in the transition of adolescents from school to work. According to Gaskell (1992), both policy makers and researchers have struggled with the idea that education should serve a practical purpose by teaching students the skills they need to succeed in the world of work. That idea has been criticized by those who feel that education should serve "loftier values," such as education "for critical inquiry, the love of knowledge, or participation in democratic processes" (p. 17). Perhaps the greatest influence of schooling on career development can be attributed to the sheer amount of time adolescents spend in schools during a critical period in their vocational development.

It is largely accepted that the schooling process will have an influence on children as they grow into adulthood. Sex-segregation which dominates during childhood begins to "break down" in adolescence. Small groups begin to form based on abilities and

interests rather than on gender (Harris, 1995). According to Harris, most high-schools are “large enough to enable adolescents to sort themselves out into groups of like-minded individuals— the “jocks,” the “brains,” the “burnouts,” and so on (p. 472). Students with similar interest are drawn together where they begin to cultivate their interests. Harris argued that the adolescents in these groups become more similar to each other over time because of mutual interests and assimilation (p. 473).

Harris (1995) referred to the phenomenon of a group of adolescents recreating the social class of the generation before it, a tendency for children to achieve a similar social status to that of their parents. Schools draw students from similar socio-economic situations which further influences the natural tendency to recreate the social status of the previous generation. Even when children in a group come from “atypical parents they are as likely as their peers to adopt the behaviors and attitudes approved by the majority of the parents” (Harris, 1995, p. 479). It is a desire to be like the “peer group” which is recreating the social structure and may eventually result in career similarities within the group.

Schools also have a more definitive role in the transition from school to work. At school, adolescents may be directly influenced by teachers and guidance counsellors. Gaskell (1992) argued that the schools influence the formation of adult personalities and adult roles, including career choices. The functions of schools include not only helping students to develop skills for their future careers but also helping target them towards occupations that suit their individual talents. Dick and Rallis (1991) referred to teachers and counsellors as “socializers” in their model of career choice. The

expectations of socializers as well as their attitudes are important influences on students (Auster & Auster, 1981). As well teachers and counsellors may provide students with experiences that impact the students' career development.

Choice of Courses

In most cases, boys and girls are educated in coeducational schools for their early education. Gaskell (1992) asked: "How is woman's work so different when their schooling seems so similar?" (p. 24). At one time it was thought that the difference in the amount of schooling between men and woman accounted for differences in occupational attainment. Now, as women are often spending as much or more time in school as men, it is clear that other factors must be involved. Gaskell examined the kind of education that women receive and the occupational direction in which it sends them.

As students near the end of their formal education, the coeducational nature of their classes begins to change. Gaskell (1992) pointed out, beginning at the secondary level young woman and men begin to "choose" courses and programs that are dominated by their own sex. This segregation of males and females increases with post-secondary education and with job-training programs. The secondary school level should therefore be considered a critical time period in the development of gender divisions.

Courses and programs of study become associated with either the male or the female gender (Gaskell, 1992). Higher course enrollments are typical for females in subjects like cooking, and history, while male dominated courses include physics, and carpentry. Gaskell identified five programs of study commonly associated with secondary schooling: academic courses (e.g. languages, history); industrial art courses (e.g.

carpentry, auto); maths and sciences (e.g. physics, chemistry); business courses (e.g. business, computers) and home economics (e.g. sewing, cooking). The gender division is most clear in the male domination of industrial arts and math/ sciences courses and the female domination of business courses and home economics classes (p. 36).

Gaskell (1992) stated that this streaming process in high school course enrollments is “the genesis of divisions that shape adult life” (p. 36). Academic courses lead to university and college, and are designed to prepare students for professional or management type careers. Industrial arts courses prepare students for apprenticeships in blue collar jobs, such as mechanics and carpentry; maths and sciences give students the background needed to enter technological fields, such as engineering; business courses often lead to secretarial or sales positions after relatively short college programs; and home economics courses are preparation for domestic tasks, such as raising a family. Whether this streaming is self-imposed or institutionally influenced, the result is the same: differential course enrollments send male and female students on different paths toward the labour market, and eventually into different careers.

Changes in the Gender Gap

In recent years there has been some equalization in the enrollment of males and females in the field of mathematics and science. Dick & Rallis (1991) concluded that female students are now enrolling in high school mathematics and science courses at the same rate, and are receiving as good or better grades. However, female students are still less likely than male students to have future career plans in male-dominated professions such as science and engineering. The authors concluded that differential course

enrollments cannot be the sole factor preventing female students from choosing non-traditional careers.

Warren (1990) studied factors influencing the career preferences of junior high school students to determine the relationship between images of science careers and the students' perceptions of those careers. The students looked at sex-biased collages of scientists (created by the author), completed questionnaires about their background, and later were asked to draw a scientist. The collages were either predominately male scientists or predominately female scientists. Several types of scientists and science practitioners (biologist, chemist, nurse, engineer) were presented. A different science career was shown highlighted every second day for four weeks. The students were randomly assigned to groups to view collages that were either male-biased or female-biased. Warren found that the type of image to which the students were exposed did have an effect on the attitudes of the students toward science careers.

Warren's study concluded that the attitudes of boys reflected more rigid stereotypes than those of girls. Almost all the male students drew male scientists whereas only half of the females drew female scientists. Most of the boys in the study were interested in traditionally male careers. Females were more likely to cite interest in traditionally male-dominated careers such as the law and engineering. Most males were uninterested in traditionally female-dominated careers. Nursing was heavily stereotyped as a female career and engineering was stereotyped as a male career by the students. Warren (1990) also stated: that "If teachers wait until high school to begin career

education, it may be too late to have an effect on children's attitudes in time to prepare them for science careers" (p. 15).

Sex Equity and Cooperative Education

Scane and Statton (1993) argued that there is a need for teachers who are involved in cooperative education programs to understand that sex stereotypes do not have to be accepted as the norm. "An enthusiastic catalyst who can get the program going and who is able to convince colleagues and administrators that the issue of sex-role stereotyping in our schools is critical to the future well-being of our society is an essential factor" (p. 42). The authors stated that equity issues should be taught in an integrated fashion throughout elementary and secondary schooling:

Continual exposure to principles of equity can help children and eventually society learn the message that work is neutral and can be done by anyone who has the aptitude and desire for any particular career, and that the rewards should not be based on gender but on other values. (p. 43)

Scane and Statton (1993) cautioned that low enrollment in non-traditional placements should not result in abandoning equity initiatives. Guest speakers in non-traditional careers, summer science programs for girls, and career days with an emphasis on gender equity are all strategies used in Ontario secondary schools to encourage students into non-traditional careers. Scane and Statton, who were primarily concerned about the experiences of girls, explained these equity programs are an important source of information.

One of the primary causes for the failure of girls to enter non-traditional fields is their lack of information about these careers. Guidance teachers must be able to supply fuller and better information about possible careers

without reference to gender, and be able to integrate an effective guidance program into the regular curriculum. (p. 43)

Gendered Work

Simon, Diplo and Schenke (1991) confirmed that in our society males have higher average wages than females. They explained that traditional social assumptions that women need money less because they are usually “dependents” of males contributed to the wage gap. Although equal wages for equal work strategies by women’s groups and trade unions have helped reduce wage gaps, the authors explained that they have failed to remove this wage gap because they only eliminate the more blatant forms of wage discrimination. In order to find a strategy for eliminating the wage gap, it is necessary to first consider the social structure of work.

Men and women both participate in the workforce, but their jobs are usually quite different. Women now make up the larger percentage of workers in careers like teaching, nursing and secretarial work, while men still dominate the trades (Simon et al., 1991). The jobs typically chosen by men, such as in engineering and technology, are usually higher paid than traditional women’s occupations.

The problem with this initial approach was that it did not take into account the gendered/gendering features of the overall division of labour—that is, that men and women tend to do different jobs. ‘Equal pay for equal work’ didn’t provide for comparisons between dissimilar jobs to determine relative worth. (Simon et al., 1991, p. 173)

The division of labour between male and female jobs was explored by Williams (1989) who examined two highly sexually segregated careers: nursing and the marine corps. The author explained that although some occupations are highly sexually

segregated, most jobs can be thought of as traditionally male or female. Williams stated that while “sexual segregation” is more extreme in some occupations than in others, “they are merely the extreme, they are merely exaggerated instances of a general social trend: the sexual segregation of work in American society” (p. 2). According to Williams, female-dominated careers included: secretaries, kindergarten and preschool teachers, and domestic workers; while examples of male-dominated careers included engineers, pilots, and mechanics.

Williams (1989) examined the experiences of men and woman in non-traditional professions. By studying the exceptions, men who chose nursing and woman who chose to be marines, the author described the experiences of the few who have begun to break down largely “gender pure” occupations. Attitudes that help perpetuate the continuing “gender purity” of occupations like nursing and the marines include gender stereotyping.

We assume that the Marine Corps demands of its soldiers certain ‘masculine’ traits– strength, aggressiveness, emotional detachment; we assume that nursing requires ‘feminine’ qualities– nurturing, caring, and passivity.
(Williams, 1989, p. 1)

Youth Employment

Adolescence is an important period for the development of career aspirations. Most adolescents enter into their first paid employment during this time (Mortimer, Finch, Owens & Shanahan, 1990, p. 204). According to Mortimer et al., the first work experiences of adolescents are highly segregated by sex roles. For example, the first job for many adolescent females is baby sitting, while boys are more likely to perform manual labour. These early job experiences may excite interests in a particular career field or they may serve to eliminate certain jobs as potential careers. Early career exploration by

adolescents follows many of the same patterns as adults. The authors explained: “boys begin to work at younger ages, work longer hours and receive higher pay than girls” (p. 204).

Youth represent a significant part of the formal and informal labour force (Ahola-Sidaway, McKinnon, Simser and Spletzer, 1996). In 1994 seventy-five percent of fifteen to nineteen year old females, and sixty-six percent of fifteen to nineteen year old males in Canada held part-time jobs of some kind (Statistics Canada, 1994). Concerns arise because female youth had lower average annual incomes, were more likely to hold service, clerical or sales jobs, and were less broadly represented across occupations than their male peers. Eighty-four percent of the females were employed within female dominated occupations.

Cooperative Education in Ontario

There are significant differences between cooperative education programs in different geographical areas. Generally speaking a combination of classroom instruction and work/placement site experience are offered to facilitate career exploration. The parameters for Ontario cooperative education programs were outlined in Cooperative Education: Policies and Procedures for Ontario Secondary Schools (Ontario Ministry of Education, 1989). This document defined cooperative education as an “experiential mode of learning” that “integrates academic study and classroom theory with experiences at the work site” (p. 3). The philosophy that guides cooperative education programs in Ontario is explained in the following excerpt from the document:

Cooperative education is a partnership among education, business,

industry and labour that usually involves students, teachers, parents, employers, and employee supervisors. Joint planning by these individuals is required to ensure a systematic progression for career exploration, career planning, and experiential learning. (p. 3).

In order to meet the guidelines for successful completion of the cooperative education program in Ontario, students are required to complete both in-school and out-of-school components. The in-school component of cooperative education programs in Ontario “forms at least one-third but not more than one-half of the total number of credit hours for the course” (p. 17). The in-school component must allow for at least 20 hours of pre-placement orientation which includes instruction on self-assessment, job-readiness, health and safety, labour unions, confidentiality, ethics, as well as the school and workplace expectations. The remainder of the in-school component is reserved for integration activities which take place throughout the course.

Structured activities with their peers that integrate classroom with on-site activities are vital to students’ understanding of their experiences. At these times the classroom becomes a forum for reflecting on personal experiences, for subjecting personal perspectives to public discussion, for personal interaction, for building and testing hypothesis, for disciplined inquiry, and for setting learning objectives. The classroom also provides an opportunity for students to make sense out of their experiences, to put these experiences into broader perspectives, to reflect on and analyse their applications, and to internalize their learning. (Ontario Ministry of Education, 1989, p. 11)

Placement Supervision

The Ministry of Education specifies that all students in Ontario cooperative education programs must have an individualized training plans that identifies the objectives of their work placement. These training plans outline the specific work skills and learning objectives for individual students at their placement site. Individual training plans emerge from site specific generic training plans which list possible objectives and

tasks at particular sites.

The generic training plan is modified to meet the needs of the individual student. Some objectives may be omitted and additional objectives may be added. This individualized plan may be altered during the placement to further meet the changing needs of the student. The individualized training plan is a working guide to the student's training placement experience.

According to the Ontario Ministry of Education (1989), the training placements or out-of-school portions of the cooperative education program should take place at work sites throughout the community. During their training placements, students are under the supervision of training site supervisors who "direct and guide students' learning" according to the students' individualized training plans. The training sites are monitored frequently by teachers to support integration of the in-school and out-of-school portions of the program, and to "provide the students with the sense that they are still part of their home school" (p. 10).

Choice of Placement Sites

The process of choosing placement sites has not been directly addressed by the Ontario Ministry of Education. Students must complete an interview with the cooperative education teacher prior to admittance to the course to determine if the student has the "necessary educational background and maturity" for the program (Ontario Ministry of Education, 1989, p. 5). Throughout the program a "close liaison must also be maintained with the guidance department, the school administration, and parents (for students under eighteen) to ensure that students have co-operative education experiences appropriate to

their educational or career goals” (p. 5). By failing to address the placement choice processes directly, the Ministry guidelines have provided considerable variation amongst cooperative education programs.

Choice of Non-traditional Placements and Careers

Several of the factors influencing women’s choices of non-traditional careers, including the roles of family, peers and counsellors were explored by Auster & Auster (1981). A profile of the typical woman choosing a non-traditional career was developed. The researchers found that women choosing non-traditional careers often had mothers who worked in high-level or non-traditional jobs, and fathers who were role models and a source of occupational identification for their daughters. Both parents and peers were supportive of women’s choices of a non-traditional careers. Notably, consistent with Harris’ GS theory, the authors found that the role of guidance counsellors was negligible.

More recently, reasons why students enrolled in vocational programs non-traditional for their gender were explored in an ethnographic study by Sandell and Burge (1988). Two females enrolled in an auto mechanics course and two males enrolled in a medical aide program were interviewed for the study. It was hypothesized that students who enroll in non-traditional placements would likely have mothers with “role innovative” jobs. Although all four mothers in the study had worked outside the home at one time or another, there appeared to be little evidence that the mothers were “role innovative”.

In the same study, Sandell and Burge (1988) hypothesized that while females in non-traditional careers would have close relationships with their fathers, males choosing nontraditional careers would have distant relationships with their fathers. Both females in

their study indicated close relationships with either the father or a male role model (in one case a mother's boyfriend). As well they indicated that it was the "male role model" or father who introduced them to mechanics. The two males in this study also indicated absent or distant relationships with their fathers. Sandell & Burge concluded that there was some evidence to support the role of the father as being significant in the choice of a non-traditional career. However, the lack of a control group and the small sample size in this study make the investigators' conclusions tentative.

The two males in the study both indicated that the opportunity for socio-economic advancement within the field of medicine attracted them to the female-dominated career of medical aid. One of the males indicated that he intended to become a physician, while the other intended to become an assistant to an anaesthetist. As physicians and anaesthetics are both male-dominated careers, neither participant planned to continue in a non-traditional career. Both males indicated that future employment opportunities were key in their reasons for choosing non-traditional placements.

The females in auto mechanics did not choose their non-traditional placements for the same reasons as the males. They both felt that they were encouraged by friends and family members. Neither had immediate plans to enter into future schooling or a job in the field of mechanics. At least one of the female participants felt that being the only female in a training program would be intimidating.

Sex Equity in Cooperative Education

Ontario cooperative education programs have been mandated not only to help eliminate barriers for students of either sex who choose non-traditional cooperative

education programs but to promote non-traditional careers. The Ontario Ministry of Education (1989) specifically stated that “educators must make a special effort to find ways of removing barriers to in-school and out-of-school placements that have traditionally been considered the domain of men or of women. Every effort should be made to stimulate the participation of both female and male students in non-traditional occupational areas” (p. 16). It is interesting to note that the wording in the Ontario document specifically mentioned encouraging both males and females in non-traditional careers.

There is some evidence that non-traditional careers are not being explored in Ontario’s cooperative education programs. Ernest Cheng’s study (cited in Nichols, 1990) found that in his sample of Scarborough secondary students taking cooperative education “several types of work have a strong gender bias” (p. 41). For example, “of the 45 students placed in child day care centres only two were males, and of the nineteen students placed at warehouses and factories only three were female” (p. 41). Since the purpose of Cheng’s study was not to focus on gender roles, he did not analyse the effects of gender bias.

There is a growing trend to encourage students to choose cooperative education placements that are non-traditional by gender. The American Association of University Woman (AAUW) Report (1995) outlined the 1990 amendments to the Carl C. Perkins Vocational Education Act of 1984 in the United States. The major changes included integrating vocational education and academic education as well as “to provide special groups –the economically disadvantaged, students with disabilities, students with limited

English, and females in non-traditional programs-- with services needed ensure their full participation in vocational education” (p. 76). The AAUW Report emphasized that policy change aside “unless we encourage girls and young women to take non-traditional courses and help them in jobs or post-secondary institutions requiring skills learned, any training they receive will have little effect on their labor-market opportunities” (p. 77). Although the Carl C. Perkins Vocational Education Act now ensures the provision of support services to female students in non-traditional placements in the United States, support services for male students in non-traditional placements are not discussed.

Group Socialization Theory and Further Research

Harris’s (1995) Group Socialization Theory of Development is the result of a substantial amount of research and study. However, as it is a recent interpretation of socialization it has yet to be tested extensively. Research that uses the GS theory as a theoretical bases may be beneficial because it would allow researchers to examine if the theory assists understanding in practical situations. In addition, the GS theory is a complex explanation of socialization and specific examples are needed to fully appreciate its complexity. The decision-making processes of adolescents exploring future career options by choosing cooperative education placements is a good example of the kind of problem GS theory can help us to understand.

CHAPTER 3

Design of the Study

Research Questions

The following six research questions were derived from the literature review and form the basis for this investigation:

1. Why do students choose to participate in cooperative education programs?
2. What factors influence the choice of traditional cooperative education placements?
3. What factors influence the decision to participate in a cooperative education placement that is non-traditional in terms of gender?
4. What reasons do cooperative education students provide to explain their choice of non-traditional cooperative education placements?
5. What influence do parents, peers, guidance counsellors and teachers have on students' decisions to choose non-traditional placements?
6. Have students who choose non-traditional placements been exposed to initiatives to promote non-traditional choices (e.g. posters, videos and guest speakers about non-traditional careers)?

Expectations

This investigation is exploratory. No study was located in the literature which attempted to determine factors influencing cooperative education placement choices by students who had been enrolled in traditional or in non-traditional high school cooperative education placements.

This study has seven principal expectations:

1. The students enrolled in non-traditional cooperative education placements will represent a small percentage of cooperative education placements.
2. Male students will be less likely to be enrolled in cooperative education placements that are non-traditional for their gender than female students.
3. Male and female students will have different reasons for choosing cooperative education placements that are non-traditional for their gender.
4. Students in traditional, as well as non-traditional cooperative education placements, will have had some previous experience in the same career fields as their cooperative education placements.
5. For students in traditional, as well as non-traditional cooperative education placements, peers will have had more influence on the choices of cooperative education placements, than parents, teachers and counsellors.

Methodology

Participants and Data Collection

After permission to proceed with the study was granted from the Lakehead University Ethics Committee as well as the participating Board of Education, the researcher to began contacting principals. Initially a second Board of Education was invited to participate in the study but was unable to participate due to time constraints. With the Board's permission, school principals were approached and asked if it they would allow the investigator to approach the cooperative education teachers with the intended study. Two principals declined citing business at the end of the school year, as

well as participation in other studies as their reasons for declining to participate.

The four participating schools had twelve separate cooperative education classes. The total number of cooperative education students was three hundred and ten. Prior to the administration of the survey, the heads of the cooperative education programs for each of the schools distributed the cover letters (Appendix A) and consent forms (Appendix B) to the teachers and their classes. The researcher spoke at length to each of the heads of the cooperative education programs and briefly to the teachers about the nature of the study as well as how and when it would be carried out.

As informed consent was needed, the cover letters and consent forms were given to the students about one week before they were scheduled to complete the survey (Appendix C). This gave the students time to sign the consent form and also have their parents sign. In most cases, heads of the cooperative education programs approached individual teachers about the study and arranged for students to complete the surveys during class time. Cooperative education classes met together infrequently as the students spend most of their time at their placement sites. This presented some problems for data collection, due to the fact that students only meet as a class once a week, there is little opportunity to remind them to return the necessary consent forms. The supervisors met many of the students during their visits to the placement sites and at those times reminded the students to return the forms. However, not all of the students were reminded to bring back the consent forms. In some cases students declined to complete the survey because they needed to use their class time to complete unfinished work. In total, 104 students of the available 310 (34%) completed the survey.

The researcher administered all the surveys by reading the directions as well as the definition of non-traditional careers. Students were reminded that participation was voluntary and they could withdraw at any time. In some cases, two or more classes were brought into a larger room so that the researcher could administer the survey to both classes at the same time. As students completed their surveys they were instructed to place them on the pile at the front of the room.

Seven students that were in non-traditional, for their gender, cooperative education placements were selected for the interview portion of the research. They were identified by themselves, their teachers or the heads of the cooperative education programs at their schools as being in non-traditional placements. Initially, the cooperative education heads discussed the possibility of interviews with the students and provided the researcher with contact information for those interested. All of the students approached about the interview agreed to participate. They were given the interview cover letter (Appendix D) and consent forms (Appendix E) to be signed by their parents and themselves.

Initial telephone contacts were made by the researcher with the students to be interviewed. The purpose of the interviews was discussed and arrangements were made for times to meet. Three of the students arranged to meet at the cooperative education placement site. Three chose to be interviewed at their schools and one chose to be interviewed at home. The interviews were semi-structured: a basic set of five questions were used (Appendix F), and the interview flowed from the initial questions with supplementary questions being used to clarify responses.

Instrument

The 20-item survey used was constructed by the author. The types of questions used in the survey included yes-no, short answer, checklists, rankings and Likert scale items. Due to the limited number of possible participants the survey was not pilot tested. However, the survey was proof read by several educators at the secondary school level to ensure that the wording of the questions was suitable.

Items #1-3 in the survey requested information regarding each participant's age, grade and gender. These items were designed to help put the rest of the data collected into context. The next five items (#4-8) required the students to answer questions about their placements. Participants were asked to describe their present cooperative education sites and to describe their work responsibilities. Students were asked whether their placement sites were their first choices. If the answer was "no," they were asked what their first choices were. They were also asked whether they had ever worked in a job related to their placements and if they had career aspirations in the same field as their cooperative education placements.

Items #9-13 required participants to discuss the employment characteristics of their parents. These items included present occupations as well as any previous experience in non-traditional careers. Students were also asked if they personally had ever been interested in careers that were non-traditional for their gender.

Items #14-17 followed a checklist format. Item #14 was used to determine if any of the popular methods of encouraging students to participate in non-traditional careers (videos, posters, guest speakers) were used in their schools. Item #15 sought to identify

from whom (mother, father, friend) students had first learned about their placement sites. Participants were asked to identify people who had either encouraged or discouraged them to choose their cooperative education placement sites in items #16 and #17. All of the checklists had an option for “other” responses and participants were asked to specify what they meant by that option.

Item #18 asked participants to rank ten factors that may have influenced their placement choices. Some of the options included placement availability, personal interest and future pay benefits. The students were to rank the items they felt were most important with the number one and the least important with the number 10. They were also instructed to use each of the numbers only once. Item #19 consisted of a checklist asking the participants to identify their future plans. Options included university, college and work.

Item #20 consisted of five statements employing a five-point Likert response format (strongly agree to strongly disagree). The statements included: “My cooperative education placement is useful for my future plans” and “I will pursue a career in the same field as my cooperative education placement”. Participants were also asked to rate the degree to which they enjoyed their cooperative education placements.

Data Analysis

Both qualitative and quantitative data were obtained in this study. The survey required some qualitative analyses including explanations for some of the yes/no type questions. For example, students were asked in Question # 10 “Has your mother ever had a job that you think is not usually thought of as women’s work”? They were to circle

either yes or no and were then prompted “If yes please explain”. A combination of simple descriptive statistics (frequencies, means and standard deviations) was used to describe most of the data. The Statistical Package for Social Sciences was used to analyse the survey data.

Seven students in non-traditional placements were interviewed. The semi-structured interviews were about 15 minutes long and provided qualitative data about the experiences of the students in non-traditional careers.

CHAPTER 4

Results

Participants

One hundred and four students participated in the study. Fifty four participants were male, and fifty were female. The ages of the participants ranged from 16-20 years. The mean age of the participants was 17.84 years, with a standard deviation (SD) of 0.83 years. Table 1 shows the distribution of the participants by their age and gender. The students were in grades 11 through O.A.C. Table 2 shows the distribution of participants by grade and gender.

Table 1

Distribution of Participants by Age and Sex

	<u>Age</u>					
	16	17	18	19	20	Total
Female Participants						
Number	3	11	27	8	1	50
Percent	6%	22%	54%	16%	2%	100%
Male Participants						
Number	4	11	31	7	1	54
Percent	7%	20%	57%	13%	2%	100%
Total Participants						
Number	7	22	38	15	2	104
Percent	7%	21%	56%	14%	2%	100%

Note: All percentages are rounded to the nearest whole number.

Table 2

Distribution of Participants by Grade and Sex

		<u>Grade</u>	11	12	OAC
Female Participants	Number		11	28	11
	Percent		22%	56%	22%
Male Participants	Number		10	41	3
	Percent		19%	76%	6%
Total Participants	Number		21	69	14
	Percent		20%	66%	14%

Note: Rounded to the nearest whole number.

Almost all of the participants (97 participants, 93%) were in cooperative education placements traditional for their gender. Five female and two male participants were determined by the researcher to be in cooperative education placements that were non-traditional for their gender. Most of the participants (73%) received their first choice of cooperative education placements. The majority (84%) had no previous experience related to their cooperative education placements. Most of the participants (76%) did plan to pursue work in their placement fields in the future.

Table 3 shows the distribution of participants in their cooperative education placement sites. For male participants, automotive/mechanical placements were most popular, with 19% of males choosing placements in that field. Other popular placement sites for male participants included retail sales (11%), trades (9%), computers (9%) and

education (7%). Education was the most popular placement site for females, with 26% choosing placements in that field. For female participants, retail/sales (12%), nursing (10%) and clerical work (10%) were among the most frequently chosen placement sites.

Table 3

Distribution of Students in Cooperative Education

	Number of Males	Number of Females	Total
Automotive/Mechanical	10	2	12
Childcare	0	2	2
Clerical	1	5	6
Computers	5	0	5
Education	4	13	17
Fitness	2	1	3
Financial Services	3	3	6
Food Services	2	0	2
Graphics/Printers	3	2	5
Hairstyle/Beauty	0	2	2
Law & Policing	3	2	5
Nursing/Health	1	5	6
Retail/Sales	6	6	12
Physiotherapy	3	3	6
Trades	5	0	5
T. V. /Video Editing	0	2	2
Warehouse\Wholesale	3	0	3
Veterinary	0	2	2
Other	3	0	3

Family Experiences in Non-Traditional Careers

None of the participants' fathers currently held jobs that were non-traditional for their gender and only 2% of mothers were in occupations that could be described as non-traditional (eg. pulp tester in a pulp mill and construction worker). When asked "Has your mother ever held a job that you think is not usually thought of as 'women's work'?", 13% of the participants indicated that their mothers had at some point worked in non-traditional careers including gas station attendant, saw mill worker, automotive parts sales person and construction worker. When asked "Has your father ever held a job that you think is not usually thought of as 'man's work'?" only 3% of participants identified that their fathers had at some point worked in non-traditional careers (these included librarian and nursing home worker).

Interest in Non-traditional Careers

Forty six male participants (85%) responded "no" to the item: "Have you ever been interested in a career that is non-traditional for your sex?". The most common reasons given for their lack of interest included "never thought about it" or "uninterested". Some respondents included specific reasons: "I like working with my hands", "I don't like taking orders" and "I don't want to work in a kitchen". Two male participants expressed a belief that most "professional" careers are dominated by men. Four responses were very strongly worded and indicated that women's work was not highly regarded: it was "too femm" [sic] or they did not want to do "women's work!".

Four male participants (7%) responded "yes" to the question: "Have you ever been interested in a career that is non-traditional for your sex?" All mentioned specific

careers of interest, including elementary school teacher, nursing, banking, and clerical work. A desire to help people and a desire to work with “chicks” were some reasons provided for their interest in non-traditional careers.

Twenty four female participants (48%) responded “no” to the question: “Have you ever been interested in a career that is non-traditional for your sex?” Participants were asked to elaborate on their responses. The reasons given for not wishing to participate in non-traditional careers included “not into fixing cars”, a strong interest in a career that was neutral or traditionally feminine, or a belief that most jobs today are gender neutral.

Twenty six female participants (52%) responded “yes” to the item: “Have you ever been interested in a career that is non-traditional for your sex?”. Automotive mechanics was the most popular non-traditional career of interest to female participants (23%). Other popular responses (with two participants interested in each type of career) were doctor, police officer, welder, sports person, and serving in the armed forces. Three female participants (12%) identified good pay as part of the reason for their interest. Three identified that the careers were fun, while two mentioned the careers were exciting.

Promoting Non-Traditional Careers in Schools

Participants were asked if any of several methods used to encourage students to choose non-traditional careers were used in their schools. Forty six participants (45%) reported noticing posters that encouraged participation in non-traditional careers in their schools. Forty five participants (44%) noticed videos about non-traditional careers. Forty two participants (41%) recalled class discussions on the subject of non-traditional

careers. Thirty nine participants (38%) were aware of guest speakers in non-traditional careers speaking at their schools. Eleven students (11 %) could recall seminars on the subject of non-traditional careers. Other methods used to encourage non-traditional careers included two participants who identified teachers as sources of encouragement. An additional two mentioned scholarships and bursaries that promoted non-traditional careers.

Finding a Placement Site

Almost half (48%) of the participants first learned of their cooperative education placements from their teachers. Twenty participants (19%) first learned of their cooperative education placements from friends. Although fourteen participants (14%) first learned of their cooperative education placements from their fathers, only eleven participants (11%) first learned of their placement sites from their mothers. School counsellors were credited as the source of placements by eleven participants (11%), while six participants (6%) first learned of their placement sites from boyfriends or a girlfriends.

Thirty two students (31%) first learned of their cooperative education placement sites from someone other than those listed. The most common “other” response by eight participants indicated that they had found the cooperative education placement sites by themselves. Six participants had previously attended or been a customer of their cooperative education placement sites. Six participants cited cooperative education teachers specifically as finding their placement sites. Six participants cited another relative such as a sister, stepfather or cousin as finding their cooperative education placement

sites. Three students had worked previously at their cooperative education placement sites.

Encouragement and Discouragement of Placement Choices

Participants were given the following statement to complete: "I was encouraged to choose my current cooperative education placement by...". The most common response cited by forty participants (39%) was that "nobody" encouraged them to choose their placements. Thirty nine participants (38%) responded that they were encouraged by their mothers (see Table 4). The next most common response by thirty seven participants (36%) was that they were encouraged by teachers. Only twenty three participants (22%) responded that they were encouraged by their fathers, while twenty one participants (20%) were encouraged by friends. The least common responses were for six participants (6%) who were encouraged by school counsellors and the eight participants (7%) who were encouraged by boyfriend/girlfriends. Six participants (6%) responded that someone from a category other than those listed on the questionnaire had encouraged them to choose their cooperative education placements. For the "other" responses, three mentioned the cooperative education teacher, two indicated themselves personally, and one mentioned a sister as having encouraged them to choose their cooperative education placements.

Participants were also given the following statement to complete: "I was discouraged from choosing my current cooperative education placement by...". Ninety one participants (88%) answered they were not discouraged from choosing their cooperative education placements by anyone (see Table 4). Five participants (5%) were

discouraged from choosing their placements by friends. Four participants (4%) were discouraged from choosing their placements by their mothers, while three participants (3%) were discouraged from choosing their cooperative education placements by their fathers. Finally, two participants (2%) were discouraged from choosing their cooperative education placements by teachers, and one participant (1%) was discouraged from choosing his/her cooperative education placement by his/her boyfriend/girlfriend. Two respondents (2%) were discouraged from choosing her/his cooperative education placements by someone other than those listed. One was discouraged by “another student” and one by an “acquaintance.”

Table 4

Encouragement and Discouragement of Placement

	Encouraged Placement Choices	Discouraged Placement Choices
Mother	39	4
Father	23	3
Friends	21	5
Boyfriend/Girlfriend	8	1
Teachers	37	2
School Counsellors	6	0
Not Encouraged/Not Discouraged	40	91
Other	6	2

Factors Influencing Placement Choice

The participants were given a list of ten factors that could influence their placement choices and asked to rank them in order of importance. Table 5 indicates that both males and females ranked “personal interest” as the most important factor influencing their placement choices. “Learning new skills” was the second most important

factor as ranked by both male and female participants, with the females ranking it higher. “Talent/Aptitude” is ranked next overall with females ranking it slightly more important than males. “Career potential” is ranked fourth overall, however, the male participants ranked it higher. “Potential for a summer” job was ranked fifth overall with male participants ranking it higher. “Placement availability” was ranked sixth overall, with the female participants ranking it higher. “Looks good on a resume” was ranked higher by male participants and ranked seventh. “Previous experience” was ranked eighth with female participants ranking it higher. “Future pay benefits” were ranked higher by males and was ranked ninth. “Not enjoying the regular classroom” was the least influential factor influencing placement choice; it was ranked least important by both sexes.

Table 5

Ranking Factors Influencing Placement

Influencing Factor	Mean Ranking	Mean Ranking (Females)	Mean Ranking (Males)
Personal Interest	2.47	2.04	2.95
Learn New Skills	3.68	3.00	4.40
Talent/Aptitude	4.65	4.87	4.75
Career Potential	4.96	4.62	4.80
Potential for Summer Job	5.90	6.61	5.13
Placement Availability	6.03	5.47	6.64
Looks good on a resume	6.10	6.19	6.00
Previous Experience in Field	6.25	6.13	6.38
Future Pay Benefits	7.26	7.85	6.22
Don't enjoy regular classroom	7.85	8.04	7.65

Future Plans of Students

There were some notable differences in the future plans of male and female participants of this study. “College” was the most common destination for the majority of the students in this study with fifty one percent of the male participants and forty two

percent of the female participants planning to go to college after high school (see Table 6). However thirty eight percent of female cooperative education students plan to go to university, while only 19% of males planned to go to university after high school. Males tended to be more likely to be indecisive about their future plans with 19% “undecided,” compared to 12% for the female participants. Beginning work after high school was the plan for 11% of the male participants and 8% of the female participants. None of the cooperative education students planned to leave high school before graduation.

Table 6

Future Plans of Participants

Future Plans	All Participants	Female Participants	Male Participants
I will go to University after I graduate high school.	29	19	10
I will go to College after I graduate high school.	48	21	27
I will begin work after I graduate high school.	10	4	6
I intend to leave highschool before graduation to work.	0	0	0
I am undecided as to my future plans.	16	6	10

Student Reflections on Cooperative Education Placements

Table 7 reports some reflections of participants about their cooperative education placements. Most of the participants either strongly agreed (49%) or agreed (23%) with the statement: “ My cooperative education placement is useful for my future plans.” Answers varied considerably to the statement: “I will pursue a career in the same field as my cooperative education placement.” Most students (64%) strongly agreed with the

statement: “I learned useful skills during my cooperative education placement.” The majority (68%) strongly agreed with the statement: “I enjoyed my cooperative education placement”. If the option to do an additional cooperative education placement was available, 48% strongly agreed and 20% agreed that they would choose to do another cooperative education placement.

Table 7

Students’ Reflections on their Cooperative Education Placements

Items	<u>Responses on a 5-point Likert Scale</u>				
	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
My cooperative education placement is useful for my future plans	50	31	14	3	4
I will pursue a career in the same field as my cooperative education placement.	29	21	28	9	15
I learned useful skills during my cooperative education placement.	65	30	3	2	1
I enjoyed my cooperative education placement.	69	23	4	3	3
If the option is available to me I would choose to do another cooperative education placement.	49	20	18	9	6

Note: N=102 as two participants did not complete this section of the questionnaire.

Reflections of Male Students in Non-Traditional Placements

Two of the participants interviewed were males in non-traditional placements. “Andrew” (all names changed to preserve anonymity) was the only male doing clerical work in his cooperative education. His placement was at a courthouse. The other male

participant involved in a cooperative education placement, "Colin," was the only male doing his cooperative education placement in the field of nursing at a nursing home. The experiences of the two males doing non-traditional placements differed considerably.

Andrew's Experiences

Andrew was eighteen and in Grade 12. His interview was conducted at his school. He was very excited, volunteering to speak about his placement. It was unclear as to whether his cooperative education placement was truly "non-traditional" for his gender. The setting, a courthouse, was definitely not dominated by one gender, however his office work tasks were traditionally feminine.

Andrew's duties at the courthouse included filing, getting mail, answering phones and doing paper work. Originally he wanted to be placed at the police station, however, he was very clear about what he wanted to be doing there: "I wanted to be doing office work." Andrew did not seem sure if his placement was non-traditional for his gender. At first, he pointed out there were more females than males at his placement site, but he explained that there were two other male officers who did the same job he was doing. After rethinking he estimated the ratio of males to females to be "half and half."

At the conclusion of the interview, Andrew was asked if there had been any reaction to his cooperative education placement by his friends. He said: "No, not really. Well, I do office work, and nobody really thinks of it as all girls' work. Nobody really brought it up. So I guess nobody has a problem with it." I asked if that perception had changed. Andrew responded: "Girls can do all the jobs guys can do and vice versa. I think so. I don't think there is a difference any more; anybody can do any job."

When asked what factors contributed to his decision to choose this cooperative education placement, Andrew mentioned that he was interested in office work and that he had some previous experience. He said: "I thought it would be neat, because I did stuff on the phone before, for a previous job". He mentioned that he liked talking on the phone and wanted to try this placement out.

Andrew enjoyed his cooperative education placement and got along well with his supervisors. He was expected to wear a tie and look professional. His appearance received some attention (His hair had 2" blond spikes) Andrew said that most people seemed to enjoy his appearance and that it "cheered up everybody." Andrew particularly liked going to court: "I get to sit at the Crown's table by the Crown Attorney, and I look all important." He also believed that he learned a great deal during his placement.

Andrew's future plans include becoming a police officer. He did not specify which area of policing appealed to him most. Andrew intended to take a further cooperative education placement at a police station. He mentioned that, in the future, should he decide to apply for a police job, he would already have positive references from his cooperative education placements. Andrew wanted to finish his OACs before going to college as he did not feel he was ready for college yet.

At the end of the interview, Andrew mentioned that his cooperative education teacher had been particularly helpful. Regarding cooperative education placements Andrew stated: "You learn a lot more, and it's more interesting". He also stated that regular classes could be boring sometimes because in the class students are sometimes required to do the same things repeatedly.

Colin's Experiences

Colin was seventeen and in grade 12. He was interviewed at his placement site which was a nursing home. Colin was very happy at his placement site and smiled often as he described his daily activities at the nursing home. He worked in the recreation department which is responsible for organizing activities for the residents. "Basically I was there to support all their needs, basic health care, and getting them involved in programs, to make them active. It was very rewarding." If there was a healthcare concern, he relayed the message to the nurses so that they could take care of it.

Colin's response to the question why he had initially chosen to participate in the cooperative education program was "to get job experience." He mentioned that it could possibly lead to a summer job and also that it would look good on a resume. He also said: "It's a totally different learning experience because you are not just in a classroom situation. You're in the real working world." For Colin, future pay benefits were not a factor for choosing this placement. He had made his decision before he was aware of the amount that nurses are typically paid.

When asked if his cooperative education placement was non-traditional for his gender, Colin explained that there were only two male nurses at the nursing home and the rest were females. He added: "And I kind of knew coming into this co-op that I would kind of get...I wouldn't say made fun of, but that I would get noticed more often. It was really untraditional because this is the first co-op placement they've had that has been a male in twenty years." The nursing home had a total of thirty nurses and Colin worked

with all of them.

Colin's future goal was to do something in the healthcare field, possibly as a nurse or an orderly. When asked what factors contributed to him choosing a cooperative education placement that was non-traditional for his gender, he responded:

Future goals. I've always been... I don't like falling into line. I like starting a new line. And I think it's great if other male students would come more into the nursing field, because there is a big demand for male nurses.

The researcher commented: "You seem to believe right away that what you were doing was a little different." Colin responded:

Well it's kind of a sad fact but there's really barely any male nurses in all of Ontario. That's mostly because it's very risky almost, because you are crossing into a field where women have always been the nurses and males are just starting to break into the field more.

Later when asked if anyone had made fun of him over his choice of cooperative education placement, Colin observed:

Of course. There are always friends who snicker and point. But it is those kind of people who get stuck in jobs that they won't want to do. If I become a nurse I won't have to work...like my dad told me, if you love your job you won't have to work a day in your life. I love the job.

The researcher asked if he was discouraged by those people who made fun of him. Colin stated that he turned it into a positive for himself. When asked if there was anyone who encouraged him in his placement, he mentioned friends who were supportive. A couple were interested in nursing themselves but were still "weighing their options." He added: "My family are behind me one hundred percent." Regarding his teachers and counsellors he stated:

Counsellors are always there for you, supporting whatever decision you make. I've talked to them about future plans and becoming a nurse is number

one. They've supported everything. Teachers... there's a couple of teachers who support and there's also the teachers who don't want outside business in the class.

Colin planned to finish high school, go to college and later possibly university in the field of nursing. He explained that his preference would be emergency medicine:

I would really like to become an emergency nurse, because...I think it is just the rush of making quick decisions, to know how to react. To know all the instruments you have to get. To know that a second late could affect someone's life. But also long term care would be very hard to deal with because you are seeing them every time you work and then one day they are not there.

The biggest challenge that Colin faced during his placement was the death of residents. Describing the impact that his cooperative education placement had on his life, he stated: "I think people dying was the biggest factor, because since I've been here there have been about twelve deaths." He believed that death was something that would be challenging for him to deal with if he became a nurse.

Reflections of Female Students in Non-Traditional Placements

Five of the participants interviewed were females in non-traditional placements. Two worked in the automotive parts field. One was a heavy equipment mechanic, one an auto body mechanic and the fifth worked in a police station. Most of the females had previous experience in the same field as their cooperative education placement and had future plans of working in the same industries, at least for a little while. They experienced both encouragement and discouragement from various friends and family. In fact, for some it appeared that they might not secure the placements that they wanted because of their gender.

Brenda's Experience

Brenda was sixteen and in Grade 11. She worked at an automotive parts shop in the shipping and receiving area. Her job was to handle incoming shipments by shelving and inputting them on the computer. Brenda worked in the "back" of the store and had no contact with the customers. She had some previous experience working on cars and had taken automotive classes at school. She was not intending to be a mechanic, but was interested in automotive parts specifically. Her initial reason for choosing this placement was that she thought it would be interesting. She explained: "It would get me some experience in a workplace, get me out of school."

When asked if she thought her cooperative education placement was non-traditional for her gender, she replied: "Yeah, because I was the only girl who worked there and the rest were guys. They've only had one girl work there. Even the teachers thought it was, they didn't want to put me there." Brenda felt that the job could be physically demanding and observed: "There was heavy parts, lifting. If you couldn't do it, the guys did it. They were really helpful there." Brenda did not feel that the physical restrictions were sufficient to keep a woman from working there.

When asked how her friends and family reacted to her choice of this cooperative education placement, Brenda said: "They liked it. They all encouraged me to do it. It was just basically the teachers that didn't want to put me there." The men at Brenda's placement did not hesitate to take a female cooperative education student. Brenda explained how the situation with her co-op teachers was resolved:

They don't normally put girls in automotive placements because... they just don't like to. They don't think it is right. So I went to the main coop teacher and he got me in. And then after that the other teachers didn't seem to mind.

Brenda said that she enjoyed her placement and would be interested in doing a job in the field. She was aware that she would make fairly good money at an automotive parts store, however that was not a factor in her choosing that placement. When asked what her future plans were, she said that she wanted to graduate and then get a job.

Dawn's Experience

Dawn was seventeen and in Grade 12. Her placement was as a heavy equipment mechanic at a garage. She had previously taken some automotive classes and had some "back yard" mechanical experience. Dawn's interview took place at her placement site. She was wearing a pair of coveralls. The equipment and the trucks were very loud so it took a few minutes to find an office where it was quieter. On the day that Dawn was interviewed she helped install a transport truck transmission. At one point she indicated that she preferred to have a busy day with lots to do.

Dawn decided to do a cooperative education placement as soon as she realized that she could do a placement at the garage. She explained it was hard getting her placement at that site. If it had not been possible to secure this placement, then she would probably not have participated in the cooperative education program. Dawn's stepfather worked at her placement site so she was familiar with it and the people there. She explained about choosing her placement site:

It would have had to be heavy equipment, and it's good that it is here 'cause I knew the people coming here. And it's difficult for a girl, it still is, to get into a place like this, without them being scared. 'Cause it was really risky, me

coming here.

She elaborated:

If I had went to [ed. another heavy equipment garage] they probably would not have accepted me. It's tough for them too. It's not like they are trying to be pigheaded or anything but it is tough for them to have a girl around, and have to make arrangements for her to get changed. And they were really good about that here.

Dawn explained that she was the first female ever to work in the truck centre. She also said that as far as her cooperative education teachers were aware, no other female cooperative education student in Northwest Ontario had done a placement in the field of heavy equipment. She knew from the beginning that her placement was non-traditional. The manager of the garage was reluctant to take on Dawn as a heavy equipment mechanic. He thought that she should do her placement in the electronics portion of the shop or do regular auto mechanics. Primarily it was the physical demands of the job that seemed to concern him at first:

But the thing is, as I get older and since I've been here I've got a lot stronger than I was. I think after a couple of years of doing it you get used of how heavy things are, and you know your limits. It just kind of bugged me... It never really did because I expected it to be worse...but they were really good about it, just follow the safety things and if you need help just ask, and I do. So it's pretty good.

It is the challenge of the job that Dawn finds most rewarding:

I've always been told I'm so scrawny and stuff. It's like I'm challenging myself to do something most girls my size could never do. I'll say most girls couldn't do this. I'm surprised I can sometimes. You get really tired and it is hard work

Several times during the interview Dawn mentioned how her stepfather helped her get the placement and supported her decision. When asked if other people had encouraged her placement Dawn replied:

My mom is really scared for me here, but she wants me to do it. She loves that I suddenly latched on to this when I met my stepdad. She thinks it's so nice and all the guys here they really want me to go for it 'cause they think that I can do it as long as I stay serious. My grandparents, lots of friends and family, everybody is proud of me.

Dawn felt that almost everybody was encouraging. Some friends at school would tease but she said that it was not mean spirited. When asked how her teachers reacted

Dawn said:

My co-op teacher was really shocked, but he thinks I'm doing really well. My physics teacher, when I told him I was coming here was like, "Sure you are." And one of the other co-op teachers has a student here, he thinks it's amazing. He just loves it, he comes here and harasses me all the time. They're all really supportive.

Being the only female in the group Dawn had some advice: "If a girl is going to do this, she has to know that she can get along with older men." In fact she stressed how important being able to get along with others was in the job. Although most of the workers got along well with others it was important to be able to "laugh things off."

Pay was not a factor for Dawn in choosing the placement (she had been unaware of the pay typical for heavy equipment mechanics) however, afterwards she thought that it was very good. "I was shocked actually to find out how much you could make here."

However, she did note: "They don't have a clause for a pregnancy term here.

Though...I'm sure if I got a job somewhere they would throw that in there for a policy, or something."

Dawn did not feel strongly discouraged from doing her placement by anybody.

Had anyone discouraged her, she explained what her reaction might have been:

I probably would have gotten really angry. Because it was hard for me to get in here. It was really hard. They were pretty iffy about getting me in. You work

hard to do something and then someone shuts you down. You build up your confidence, and you know you can do it, and then someone goes, well you probably shouldn't do that, it's not for you. And you're like, if it wasn't for me I wouldn't be trying...I just usually ignore people like that.

One of Dawn's friends had chosen a placement involving electrical work. When asked if she thought her friend's placement had an effect on her choice, Dawn replied:

Well, she was my best friend at the time. We're still really close. Just knowing that she had done it, I was planning to come here this year anyway it just gave me a little boost. If she can do it so can I.

Erin's Experience

Erin was sixteen and in Grade 11. Her interview took place at the school. Erin, who planned to become a police officer, was doing a placement with the victim witnesses office at a police station. Although females are involved in various aspects of policing, several of the female students listed it as an example of a non-traditional career in the survey. Erin's duties at her placement included mostly clerical work, filing, answering phones and paper work.

Having volunteered with a police youth corps for several years, Erin had some ideas about what policing would be like. Her cousin had been in the youth corps before she joined and her sister joined after she did. She explained that at one time she had wanted to be a social worker but the youth corps experience had helped her decide to go into police work. She felt that all of her family was supportive and did not mention anyone who discouraged this placement. Erin also mentioned that her aunt was a police officer and that she had taken her on "ride alongs." This meant that she was permitted to observe from the police car while her aunt was on patrol.

When asked if she thought her placement was non-traditional, Erin replied: “I think it used to be. ...All of the chiefs are still male. But I’m in an office with two females because they deal with domestic cases.” They wanted a female cooperative education student because they dealt with many domestic abuse cases where the victims were usually female.

Erin mentioned that in some areas of policing, such as criminal investigations, there were very few females. Erin’s future plans included wanting to be a police officer with the tactical forces unit. She said: “No females have ever made it. They can’t handle it. They were telling us, their qualifications were harder than a fire fighter’s.” Another possibility she had considered for her future was that of an RCMP officer.

Erin was very much against having lower standards or quotas which would enable more women to enter some of these physically demanding and male-dominated jobs. She stated:

You want someone who is capable of doing the job. You don’t want to go easy on someone because they want the job and they are female... It’s just not fair. It’s not. Yes, females and males are different. Obviously. But they shouldn’t be when it comes to a job.

Fran’s Experience

Fran was seventeen and in Grade 12. She was doing her placement at an automotive parts store. Fran’s interview took place at the store where it was difficult to hear each other. Fran chose to be part of the cooperative education program for the opportunities. She wanted to have more work experience. She said that her reason for doing the placement was:

To find out really what I want to do. And I found out I don’t want that

(to be a mechanic). I don't want to work on vehicles every day of my life. I'd rather be selling vehicle parts.

Fran did not consider working at an automotive parts store as non-traditional for a female. She said: "Nowadays you see a lot more women in automotive parts stores."

She specifically wanted to work in an automotive parts store. She explained:

I know things about cars. It wouldn't be hard for me to help someone out, like if they have a question, cause I know a lot of stuff about vehicles now. And I'm learning more each day, so I wanted to go into something that I know about and I'm good at.

Wages were not a factor for Fran at all in choosing her cooperative education placement. During the interview Fran did not mention anybody who had either encouraged or discouraged her placement choice. Fran said that she had enjoyed her cooperative education placement and had plans to work in the field. Fran wanted to go to work after she graduated although she thought she might go back to school later to further her education.

Gabbie's Experience

Gabbie was sixteen and in Grade 11. Her interview took place at her high school. Gabbie completed her cooperative education placement at an auto body shop where she prepped vehicles for painting. When asked why she wanted to do her cooperative education placement at an auto body shop she replied: "Personally I thought it would be a good experience. Like, job-wise I never had an actual job where I got paid."

When asked if her cooperative education placement was non-traditional for her gender she answered: "Ya. So far from what I've been told. I'm the only female who's ever worked in the body shop there. So I think it's non-traditional." In fact, at the large

garage where Gabbie worked the only other females employed were at the service counter and in the parts department.

Gabbie explained her reasons for choosing her placement:

It was different. I enjoy doing boyish things. I had some experience doing this sort of thing. My sister's boyfriend and my uncle are in the field. It is fun and the skills are useful for what I'd like to do career-wise in the future. I like that I am able to do it. It makes me proud.

When asked if the future pay benefits were a factor, Gabbie replied that it was not important. She just enjoyed the work.

Gabbie's family were supportive of her placement choice although her father was hesitant at first. She describes her friend's reaction: "My friends thought it was a joke. They didn't think I could do it. But I did. I'm going to be working there this summer." Gabbie was obviously very happy and proud about that. She explained that she really enjoyed her placement:

I was just surprised at the reaction from everybody. I got along with the others really well. It's a fun and exciting job if you don't mind the dirt!

Gabbie planned to finish high school and then use the money from her summer job to help pay for university. She mentioned the possibility of owning her own automotive body shop one day. It appeared as if either Gabbie did not really understand the path to owning an automotive body shop or she liked the idea as a hypothetical possibility, but did not intend on pursuing it as a career option.

CHAPTER 5

Discussion and Conclusions

This study examined the experiences of secondary students in cooperative education programs and the factors influencing the students' choices of traditional and non-traditional placements. The initial objectives were to determine:

1. Why students choose to participate in cooperative education programs.
2. What factors influence the choice of traditional cooperative education placements.
3. What factors influence the decision to participate in a cooperative education placements that are non-traditional in terms of gender.
4. What reasons cooperative education students provide for their choices of non-traditional cooperative education placements.
5. What influence parents, peers, guidance counsellors, and teachers have on students' decisions to choose non-traditional placements.
6. Have students who chose non-traditional placements been exposed to initiatives to promote non-traditional choices (e.g. posters, videos and guest speakers about non-traditional careers).

This chapter discusses the results and findings as they relate to the research expectations and to the literature. Curriculum implications arising from the study as well as future research priorities are suggested. Finally, the limitations of the study are discussed.

G.S. Theory and Non-traditional Placement Choice

Harris (1995) stated that during adolescence it is the peer group that has the most influence in forming interests. In this study the peer group's influence on placement choices was made evident as several of the students interviewed mentioned friends who were interested in the same or similar careers. Colin mentioned friends who were considering nursing careers. Dawn's best friend was a female student who had done a cooperative education placement in electrical shop. Erin had an aunt that was a police officer and her sister was also considering policing as a career option. Most of the students interviewed reported their friends were supportive of their placement choice. In some cases the friends and peers teased the students in non-traditional placements, however, all of the students interviewed seemed to feel that the teasing was good natured. It is possible however, that some students would choose not to participate in non-traditional placements because they feared teasing from their peers.

At the same time, most of the students interviewed also stated that their parents encouraged their placement decisions. Even when parents were initially hesitant about non-traditional placements ultimately the students in non-traditional placements felt that their parents supported their decisions. In more than one case it is the father (or stepfather) that seemed to be the most supportive of the non-traditional career. Inconsistent with the conclusion of Dick and Rallis (1988) that the relationships between fathers and sons who were in non-traditional careers were "distant," Colin seemed to have a very good relationship with his father. During the interview, Colin quoted his father on the topic of how important it was to be happy in your job. The students in non-traditional

careers appeared to place at least as much emphasis on parental support as peer support. Dawn explained that her stepfather was the reason that she was allowed to do her placement at the heavy equipment garage and credited her non-traditional placement with helping them develop a closer relationship. A larger data set would be required to investigate the role of the father for students making non-traditional placement choices before a conclusion could be drawn on this issue.

This study suggests that both peers and parents influence students' choices of non-traditional placements, and may play separate roles in supporting those decisions. The students seem to be forming friendships with students that have similar interests, as Harris (1995) has suggested. Through these friendships it is likely that their interests in a non-traditional careers were cultivated. At the same time the students in non-traditional placements received approval from their parents. That approval may have confirmed for them that their placement choice was a good idea. Thus, the roles of parents and peers are different but fundamental to students who choose to participate in non-traditional placements.

Frequency of Students in Non-traditional Placements

The expectation that students in non-traditional placements would make up a very small percentage of the students in cooperative education programs was confirmed. Seven students in total from the 104 cooperative education students surveyed were in non-traditional placements. A total of seven from the 310 cooperative education students were eventually interviewed because they were determined to be in non-traditional careers. On closer examination it is unclear if all of the students who were interviewed were actually in

non-traditional placements, a finding that will be discussed in the practical implications of this study. The most salient examples of non-traditional placements were Dawn, who was placed at a heavy equipment garage, Gabbie, who was at an auto body shop and Colin, who was at a nursing home. Not only were their placement sites dominated by the opposite gender, their tasks and daily activities were also atypical for their gender.

As Sandell and Burge (1988) suggested, this generation does appear to be participating more in non-traditional careers than their parents' generation. Only 2% of the participants mothers and none of the fathers were currently in jobs that could be considered non-traditional for their gender. Thirteen percent of the participants' mothers and 3% of their fathers had at some point worked in non-traditional careers. It was impossible, due to the small numbers, to determine if there was any relationship between students having parents in a non-traditional careers and students themselves having an increased interest in non-traditional careers.

Factors Influencing Placement Choice

It is not surprising that both the male and female participants ranked personal interest as the most important factor influencing placement choice. Participants ranked learning new skills as the second most important factor influencing their placements decisions. Both of these reasons are compatible with the objectives of cooperative education (Ministry of Education, 1989). However, there were some differences between the factors influencing male and female choices of particular placement sites, which are interesting.

One concern was that females ranked the availability of a placement higher than

the males (availability of a placement refers to how easy it is to get a particular placement site). This may indicate that females are willing to accept options that are easier for them to secure. Since non-traditional cooperative education placements are not the norm, they may be viewed as too bothersome.

Males ranked future pay benefits, as well as the potential for summer jobs, higher than the females. It is possible that female students do not put enough emphasis on acquiring more experience and greater pay benefits. This is consistent with observations made by Gasser, Oliver and Tan (1998) and Mortimer, Finch, Owens and Shanahan (1990) that women tend to have lower pay expectations than men. It was impossible to compare the data between the students in non-traditional placements with those in traditional placements due to the low numbers in non-traditional careers.

Most of the students who chose non-traditional cooperative education placements recognized that their non-traditional choices represented a divergence from the norm. Instead of viewing this negatively, most students in non-traditional placements believed that the novelty of their choices was a positive factor. One possibility is that the non-traditional choices represented a challenge for them which may have resulted in increased self-esteem. Alternatively, they may have enjoyed the extra attention that non-traditional placements brought them. This is an aspect of non-traditional placement choice is one that calls for continuing research.

Female Interest in Non-traditional Careers

Although the actual number of students participating in non-traditional careers was quite low, interest in non-traditional careers was high, especially among female

students. Fifty two percent of female participants expressed some previous interest in a career that was non-traditional for their gender. The survey responses indicate that many of the female participants believed that most jobs today were being done, or could be done, by either sex. That expression of interest needs to be cultivated to a greater extent in schools, to move from thinking about non-traditional careers to actually exploring them as career options.

One theme that emerged for the female students in non-traditional placements was that the non-traditional work in which they were interested was challenging. The perception of the work as being challenging was definitely part of its appeal to female students who participated in non-traditional placements. The non-traditional work was described (by the female participants) as harder work than most traditionally feminine jobs. One participant felt the difficulty of the job warranted the higher pay benefits that people working in that career received.

All of the female students in non-traditional placements denied that pay benefits were a factor influencing their choice of non-traditional placements during their interviews. However, several of the female participants in traditional placements identified good pay as one of the reasons non-traditional careers had the potential to interest them. Female participants also attributed their interest in non-traditional careers to the enjoyment of the work, combined with the excitement of the career. Twenty three percent of the female students interested in non-traditional careers specifically mentioned an interest in auto mechanics. Since most high schools offer classes in automotive mechanics there is significant potential for fostering the interests of girls in this career. One way of

introducing girls into mechanical careers is to specifically target them with promotions for introductory mechanical courses. Posters that show both male and female students in the mechanical workshops and explain the benefits of basic automotive knowledge would be a start.

It is not necessary, and probably undesirable, for girls to be in “girls only” mechanics classes. Since part of the appeal of these courses may be that they are challenging, it is possible that girls would assume that in a females only mechanical course the material would be made easier for them. This would not benefit the self-esteem of girls, who may subscribe to the stereotype of men’s work as being more difficult than that of women. Further, as Dawn mentioned in her interview, part of being successful in a non-traditional setting is learning to get a long with males. Mixed-sex classes would give female and male students an opportunity to learn how to work well together. Other technology classes such as carpentry, welding, and construction technology could use the same approach.

Male Interest in Non-traditional Careers

Male students expressed less interest in non-traditional careers than did female students. While many female participants believed that most jobs were gender neutral, very few male participants shared that view. Several authors, including Warren (1990) and Burge (1990), have argued that males have more rigid sex stereotypes of careers than do females.

This study confirmed that males were more rigid in their sex-stereotyping than were the females. Not only did males choose non-traditional placements less frequently,

they also expressed less interest in non-traditional careers. Several responses to the question of why they were not interested in non-traditional careers were very strongly worded. It was clear that many male students believed that participating in non-traditional placements was beneath them. Among the stated reasons for disinterest in non-traditional careers were that most professional careers were dominated by men, while others explained they did not like taking orders. If “woman’s work” is viewed as second class work by these young males, it is understandable that they do not want to participate in it. As long as society continues to view “woman’s work” as second class, it will not be easy to attract males into female-dominated careers.

For those who were interested in non-traditional careers, a “desire to help people” and “personal interest” were the reasons most frequently cited. The small number of males who attempted non-traditional placements had specific careers in mind. For male students the most important implication for teachers should be in making sure that those who do participate in non-traditional careers are not teased or harassed. For example, Colin indicated that he had expected people to notice his non-traditional placement, and he seemed to brush off the teasing he did experience. However, Colin may not be typical, and boys need to be encouraged to shed sex-role stereotypes just as girls have been (Murray, 1999).

The Role of Teachers and Guidance Counsellors

Teachers were second to mothers in encouraging students in their cooperative education placements. Further evidence for the importance of teacher influence was the large percentage of the students who learned about their placement sites from their

teachers. In this study teachers, especially the cooperative education teachers, were reported to have a greater effect on placement site decisions than was anticipated by the investigator. Andrew, who was completing a placement in an office, stated that his cooperative education teacher was the best teacher he ever had. Dick and Rallis (1991) concluded that teachers were especially important when students were making a non-traditional choice, a conclusion that was supported in this study.

Most students in non-traditional placements found their teachers to be supportive of non-traditional career choices. However, one student explained that her cooperative education teachers were reluctant to place her in an automotive parts store because she was female. The student persevered and managed to get the placement she wanted. However it is likely that many students in that situation might have given up. Burge (1990) observed that educators are sometimes reluctant to enroll female students in non-traditional careers, often fearing that the careers would not “suit them as well for future life roles” (p. 9).

Teachers of cooperative education classes need to support the decisions of students who make non-traditional choices. Teachers who make it difficult for students who are interested in non-traditional careers to get the placements they want, may negatively affect the life paths of these students. Denying them the opportunity to “test out” these careers may result in them abandoning their interests, as they may expect that participation in the preferred career may not be easily accessible for them. For young woman interested in non-traditional careers, especially those who are intending to work immediately after high school, this could mean that they will have to be complacent with

lower paying “woman’s work.”

Cooperative education teachers need to recognize that when they attempt to place females in non-traditional settings, there may be some employers who choose not to accept them. The perception that female students may not be physically capable of demanding physical work is one possible concern of potential placement employers. Some are concerned about accommodating a female in a male dominated setting (e.g. woman’s washrooms and change areas). It is the responsibility of the cooperative education teacher to support and encourage students during the process of seeking a placement (Ontario Ministry of Education, 1989).

Participation in Non-traditional Placements

Students did not believe their placements were non-traditional in some cases. For example, Erin (at a police station) and Fran (at an automotive parts store) did not believe their placements were non-traditional for their sex. Andrew (who did clerical work at a courthouse) seemed unsure if his placement was traditional or non-traditional. In contrast Dawn (at a heavy equipment garage), Gabbie (at an auto body shop) and Colin (at a nursing home) were very sure their placements were non-traditional. It was difficult for the researcher, as well, to determine whether a particular placement was non-traditional. The labelling of a particular job as non-traditional is probably an ephemeral designation. As society and gender roles change, so does the definition of what is, and what is not, a non-traditional placement by gender.

Job Niching

Job niching occurs when males are given more masculine tasks and females are

given more feminine tasks, within the same workplace. McKinnon (1995) suggested that job niching might be occurring in some non-traditional careers. In certain cases the everyday activities of students placed in non-traditional placements may seem traditional for their gender. For example, although Erin wanted to be a police officer, her placement with the victim witness office was in a female dominated area of policing. She was in an office, completing paperwork and helping people. Her work might be characterized as more like social work than what many would consider “police work.” Even Colin at the nursing home was helping with the physical fitness of the residents at the home, rather than dealing with regular nursing work. It is difficult in a cooperative education setting to determine whether the activities and responsibilities involved were a consequence of job niching, or if they were simply normal constraints that occur with high school cooperative education placements.

Future Plans of Students

In general female students were more likely to have future plans that included university, and were less likely to seek employment immediately after graduation from high school. Females were less undecided about their future plans, and more likely to seek additional schooling. Educational attainment correlates positively with income which should mean that staying in school longer will lead to higher future incomes for females. However, there is a possibility that females may still direct themselves into lower paying careers regardless of their educational attainment.

Sandell and Burge (1988) suggested that females believe that they need more schooling or training after their non-traditional placements, while their male counterparts

believed they were ready for the world of work. One of the female students interviewed had a summer job at her placement site. It was interesting to note that three of the female students interviewed stated they were ready to begin work in the same industry as their placement site. Ahola-Sidaway, McKinnon, Simser and Spletzer (1996) noted that for non-college/non-university bound women, cooperative education programs were especially important in developing skills necessary for the world of work. For the two female students who intended to work immediately after high school, working in a male-dominated occupation could mean a significant pay advantage compared with traditional female careers.

Previous Experience

The hypothesis that students in cooperative education placements would have previous work experience related to their cooperative education placement was not confirmed. In fact, most of the participants surveyed (77%), did not have previous work experience in the same field as their cooperative education placements. However, of the students who were in non-traditional placements, most (85%) had some experience in a similar area, although not necessarily a job. Had the survey question been worded “experience” instead of “worked in the same or related job,” the results may well have been different.

Most of the students interviewed had some experience in a similar field to their placements, although not necessarily formal job experience. The four girls involved in mechanical placements all had some “backyard” mechanical experience and had taken “tech classes” (specifically automotive classes). Andrew had also worked in a clerical job

prior to his placement in an office setting. Erin had belonged to a community group related to policing before choosing her placement with the victim witness unit at a police station. Only Colin did not have any experience related to his cooperative education placement.

Tech classes included keyboarding, food services, construction technology and automotive mechanics, and are an important part of the school-to-work transition for adolescents, according to Ahola-Sidaway et al. (1996). To encourage students to enter non-traditional careers, tech classes must become more gender neutral. These classes are among the most highly sex-segregated classes offered in most high schools (Gaskell, 1992) and can be intimidating to students who do not belong to the gender which is dominant for that class. The experience gained in tech classes is a necessary part of entering into non-traditional careers. These early experiences increase levels of curiosity about these subjects, and help provide students with the confidence to attempt career exploration programs like cooperative education.

Promoting Non-Traditional Careers in Schools

A sizable minority of participants noted that in their schools they had been aware of posters (45%), videos (44%), class discussions (41%) and guest speakers (38%) promoting non-traditional careers. It is a positive sign that there is some effort on the part of the schools to encourage non-traditional career choices. However, there was no obvious connection between noticing the promotion of non-traditional careers, and deciding to enrol in a cooperative education program and choosing non-traditional placements. Van Buren, Kelly and Hall (1993) explained that brief interventions, such as

video tapes, do not significantly increase the non-traditional career interests of adolescents as a whole. These efforts may have some cumulative benefits in helping to break down the sex-stereotypes of adolescents when more than one intervention is used over time.

It is apparent that the challenge of traditionally male careers is appealing to some female students. This discovery may lead to the design of more effective promotional strategies to help attract females to non-traditional careers. Further research with focus groups in non-traditional placements would be useful to help develop promotional strategies that appeal to females. Continued use of promotions illustrating both males and females in non-traditional careers may help reduce sex-role stereotyping of careers for all students.

While it is important to continue to promote non-traditional careers for female students, it may be even more critical to encourage male students to consider careers that are non-traditional for their gender. Having more males engaged in careers that are traditionally feminine could elevate the status of work previously thought of as traditionally feminine. Some students mentioned scholarships and bursaries promoting non-traditional careers as something they noticed within their schools. Perhaps financial incentives in the form of more scholarships and bursaries might attract students to non-traditional career options.

Limitations

This exploratory and descriptive study used both qualitative and quantitative methods. One of the major limitations of this study is the small number of participating students enrolled in non-traditional careers. An effective quantitative study of non-

traditional placement choice requires a much larger group of participants. The non-parametric statistical analysis in the present study is limited. Specifically, statistical comparisons between traditionally placed student rankings of factors influencing placement versus the rankings of students in non-traditional placements would be interesting. In addition, it would be interesting to compare the roles of parents and peers in influencing placement choices across the two groups.

The number of female participants interviewed provided enough information to determine common patterns in their narratives. However, as there were only two male students in non-traditional placements, it was not possible to describe common patterns from their interviews. A larger sample would also be a more effective way of comparing the experiences of traditional students with those who make non-traditional choices, particularly in the case of male students making non-traditional placement choices.

Defining careers as traditional or non-traditional was a difficult task. In many cases it was possible to classify jobs as traditional or non-traditional by using examples from the research on non-traditional careers. However, as progress is being made and more jobs are seen as gender neutral, it is difficult to determine if a particular job should still be considered non-traditional. This was especially evident with law enforcement. Although the field has been dominated by males for decades, there have been many changes and now law enforcement has become more gender neutral. Many of the students cited police work as an example of a non-traditional career for women. However, the student in the placement felt that the job was no longer non-traditional for women.

A further limitation of the study stems from the wording of a question regarding

the previous work experiences of the students. It stated: "Have you ever worked in the same job or in a related field to your cooperative education placement"? It did not mention volunteer work, clubs or other places where they may have learned skills that would be of use in their cooperative education placement. Had the question been worded "Have you had any previous experience (job, volunteering, clubs etc.) that relates to your cooperative education placement?," it may have been more valuable. However this limitation was not predicted at the time the questionnaire was constructed, and was not identified during the piloting of items.

Conclusion

This study has shown that cooperative education teachers need to encourage students who want to participate in non-traditional placements. It is clear that the support of the teaching staff is very important in encouraging students to consider non-traditional placements. It is a teacher's responsibility to help interested students find non-traditional placements and to encourage others to consider them. Specifically they need to provide support in situations where students might be having difficulty obtaining placements at non-traditional sites. Teachers also should liaise between students and business people. They are well placed to foster positive attitudes toward non-traditional placements among employers.

Parents and peer groups are both vital in the decision-making process of students considering non-traditional placements and careers. The socialization role of parents and peers is significant, with both groups having an important role in the decision making process. The results of the present study confirmed the importance of peer influence on

personal career interest. However, it was clear the role of parents should not be underestimated, particularly when students are making non-traditional choices. Certainly Harris's (1995) G.S. theory provided a useful framework for examining this complex question, but may tend to underestimate the influence of parents, and perhaps teachers.

The present study highlights the need for research regarding males who choose non-traditional cooperative education placements and careers. The two males who participated in non-traditional placements in this study reported that they enjoyed their experience. The reality of male students choosing not to participate in placements considered non-traditional for their gender because of peer pressure is apparent. Undoubtedly the rigid sex-role stereotyping of careers by male students continues to be an important issue in education.

The majority of cooperative education students, including those exploring non-traditional career options, enjoyed the experience. The perception of many female participants that most occupations are gender neutral is encouraging. However, equality cannot be achieved while male students continue to perceive occupations that were traditionally the domain of women as second class. Similarly, female students must also learn that they should not devalue their work, whether it is in a traditional or a non-traditional career. The end goal is a society in which students make career choices based on their interests and aptitudes rather than their gender.

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Appendix A

May 17, 1999

Dear Parent/Guardian

My name is Vikki Lefebvre and I am a graduate student in the Faculty of Education at Lakehead University working on a study entitled Factors Influencing Choice of Non-Traditional (by Gender) Cooperative Education Placement.

The purpose of this study is to provide information about the experiences of students participating in the cooperative education program. I am most interested in comparing the experiences of students in cooperative education placements which are non-traditional for their gender with the experiences of students in traditional placements.

The reasons students choose to participate in the cooperative education program, their personal background, their experiences within the program and their future academic and career plans are all of interest.

For the first stage of this study I have prepared a survey which should take approximately 10-15 minutes to complete. Some students may later be asked if they would like to participate in a short interview. There are no benefits for students who participate in this study. Participation in any portion of this study is voluntary and students may withdraw at any time. Students will not include their names on the survey and all information gathered will remain confidential. All data will be stored for seven years and a copy of the final study will be available at Lakehead University for those interested in the final analysis. Completion of the attached consent form is needed before your son or daughter may take part in this study.

A brief report of the results of the study will be sent to participating schools in the fall and will be available to interested parents and students.

Sincerely,

Vikki Lefebvre

Appendix B

My 17, 1999

My signature on this form indicates that my son or daughter will participate in a study by Vikki Lefebvre entitled Factors Influencing Choice of Non-Traditional (by Gender) Cooperative Education Placement. I understand that my son or daughter will be asked to complete a questionnaire which will take approximately 15 minutes to complete.

I have received an explanation about the nature of the study and its purpose. I understand the following.

1. My son or daughter is a volunteer and can withdraw from the study at any time.
2. There is no danger of physical or psychological harm.
3. The data provided by my child will remain confidential.
4. The final analysis of the study will be available at Lakehead University, following the completion of the study.
5. The researcher agrees to store all data collected during this study for seven years.

Signature of Parent or Guardian
(If student is under 18 years of age)

Date

Signature of Student

Date

Appendix C

Cooperative Education Survey

Directions: I am interested in learning about factors that influence choice of cooperative education placements. Please take 15 minutes to tell us about your background and experiences in cooperative education. This questionnaire is confidential and anonymous.

NOTE: Please keep in mind the following definition as you answer the questionnaire. A non-traditional career is when a person chooses a career that has been strongly associated with the opposite sex. For example when female chooses a career which has been traditionally associated with men (eg. mechanics, engineering); or when a male chooses a career which has been traditionally associated with women (eg. nursing, secretarial)

1. Age _____

2. Grade _____

3. Sex (please circle) **Male** **Female**

4. Present Cooperative Education Placement

Site: _____

5. Work responsibility: _____

6. Was this your first choice for your cooperative education placement? **Yes** **No**

If your answer to the previous question was "no" what was your first choice for a cooperative education placement? _____

7. Have you ever worked in the same job or in a related field to your cooperative education placement?

Yes **No**

If "yes" explain _____

8. Would you like to have a career in the same job, or in a related field to your cooperative education placement?

Yes **No**

Please explain _____

9. Mother's current occupation _____

10. Has your mother ever had a job that you think is not usually thought of as "women's work"?

Yes **No**

If yes please explain. _____

11. Father's current occupation _____

12. Has your father ever had a job that you think is not usually thought of as "man's work"?

Yes **No**

If yes please explain. _____

13. Have you ever been interested in a career that is non-traditional for your sex (please refer to the definition on first page of questionnaire)?

Yes No

If "yes" which career would you be interested in and why? _____

If "no", why not? _____

14. Have you ever noticed any of the following methods used in your school to encourage students to choose non-traditional careers? (Check any that apply)

- a. _____ Videos
- b. _____ Posters
- c. _____ Class discussions
- d. _____ Seminars
- e. _____ Guest Speakers
- f. _____ Other (please specify) _____

15. From whom did you first learn about your placement site? (Check any that apply)

- _____ Mother
- _____ Father
- _____ Friends
- _____ Boyfriend/girlfriend
- _____ Teachers
- _____ School Counsellors
- _____ Other (please specify) _____

16. I was encouraged to choose my current cooperative education placement by... (Check any that apply)

- _____ Mother
- _____ Father
- _____ Friends
- _____ Boyfriend/girlfriend
- _____ Teachers
- _____ School counsellors
- _____ Nobody
- _____ Other (please specify) _____

17. I was discouraged from choosing my current cooperative education placement by...
(Check any that apply)

- Mother
- Father
- Friends
- Boyfriend/girlfriend
- Teachers
- School Counsellors
- Nobody
- Other (please specify) _____

18. Several factors may have influenced your choice of a placement. Please number the following
(1 through 10) according to how important you feel each is. Number the most important 1 and the least important 10. (Use all numbers 1 to 10 only once)

- Placement Availability
- Personal Interest
- Potential for summer job
- Talent/aptitude
- Previous experience in the field
- Learn new skills
- Career potential
- Future pay benefits
- Don't enjoy regular classroom
- Looks good on a resume

19. Please check the statement (only one) which best describes your future plans.

- I will go to University after I graduate high school.
- I will go to College after I graduate high school.
- I will begin work after I graduate high school.
- I intend to leave high school before graduation to work.
- I am undecided as to my future plans.

20. Please read each of the following statements and circle your response.

A. My cooperative education placement is useful for my future plans.

Strongly Agree Somewhat Agree Uncertain Somewhat Disagree Strongly Disagree

B. I will pursue a career in the same field as my cooperative education placement.

Strongly Agree Somewhat Agree Uncertain Somewhat Disagree Strongly Disagree

C. I learned useful skills during my cooperative education placement.

Strongly Agree Somewhat Agree Uncertain Somewhat Disagree Strongly Disagree

D. I enjoyed my cooperative education placement.

Strongly Agree Somewhat Agree Uncertain Somewhat Disagree Strongly Disagree

E. If the option is available to me I would choose to do another cooperative education placement in the future.

Strongly Agree Somewhat Agree Uncertain Somewhat Disagree Strongly Disagree

****Thank you for completing the cooperative education survey,***
your help is greatly appreciated.*

Appendix D

May 17, 1999

Dear Parent/Guardian

My name is Vikki Lefebvre and I am a graduate student in the Faculty of Education at Lakehead University working on a study entitled Factors Influencing Choice of Non-Traditional (by Gender) Cooperative Education Placement.

The purpose of this study is to provide information about the experiences of students participating in the cooperative education program. I am most interested in comparing the experiences of students in cooperative education placements which are non-traditional for their gender with the experiences of students in traditional placements.

The reasons students choose to participate in the cooperative education program, their personal background, their experiences within the program and their future academic and career plans are all of interest.

Your son/daughter's placement choice is non-traditional (by gender). I am asking students who are involved in non-traditional placements if they would participate in a short (approximately 15 minutes) interview to discuss their cooperative education placements with me. I am interested in factors that may have influenced their choice.

There are no benefits for students who participate in this study. Participation in any portion of this study is voluntary and students may withdraw at any time. All students will remain anonymous and all information gathered will remain confidential. All data will be stored for seven years and a copy of the final study will be available at Lakehead University for those interested in the final analysis. Completion of the attached consent form is needed before your son or daughter may take part in this study.

A brief report of the results of the study will be sent to participating schools in the fall and will be available to interested parents and students.

Sincerely,

Vikki Lefebvre

Appendix E

May 17, 1999

My signature on this form indicates that my son or daughter will participate in a study by Vikki Lefebvre entitled Factors Influencing Choice of Non-Traditional (by Gender) Cooperative Education Placement. I understand that my son or daughter will be participating in an interview about his or her cooperative education placement which should take approximately 15 minutes.

I have received an explanation about the nature of the study and its purpose. I understand the following.

1. My son or daughter is a volunteer and can withdraw from the study at any time.
2. There is no danger of physical or psychological harm.
3. The data provided by my child will remain confidential.
4. The final analysis of the study will be available at Lakehead University, following the completion of the study.
5. The researcher agrees to store all data collected during this study for seven years.

Signature of Parent or Guardian
(If student is under 18 years of age)

Date

Signature of Student

Date

Appendix F

Interview Format

The participant will be asked these five basic questions. They will be encouraged to elaborate on their answers.

1. Why did you initially choose to participate in the cooperative education program?
2. Do you think that your cooperative education placement is non-traditional in terms of gender?

(Refer to the definition of non-traditional if necessary)

3. What factors contributed to your decision to choose a placement that was non-traditional?
4. Have you enjoyed your cooperative education placement?
5. What are your future career plans?