A STUDY IN EDUCATIONAL MOTIVATION:
STUDENTS' MOTIVATION RELATED BELIEFS
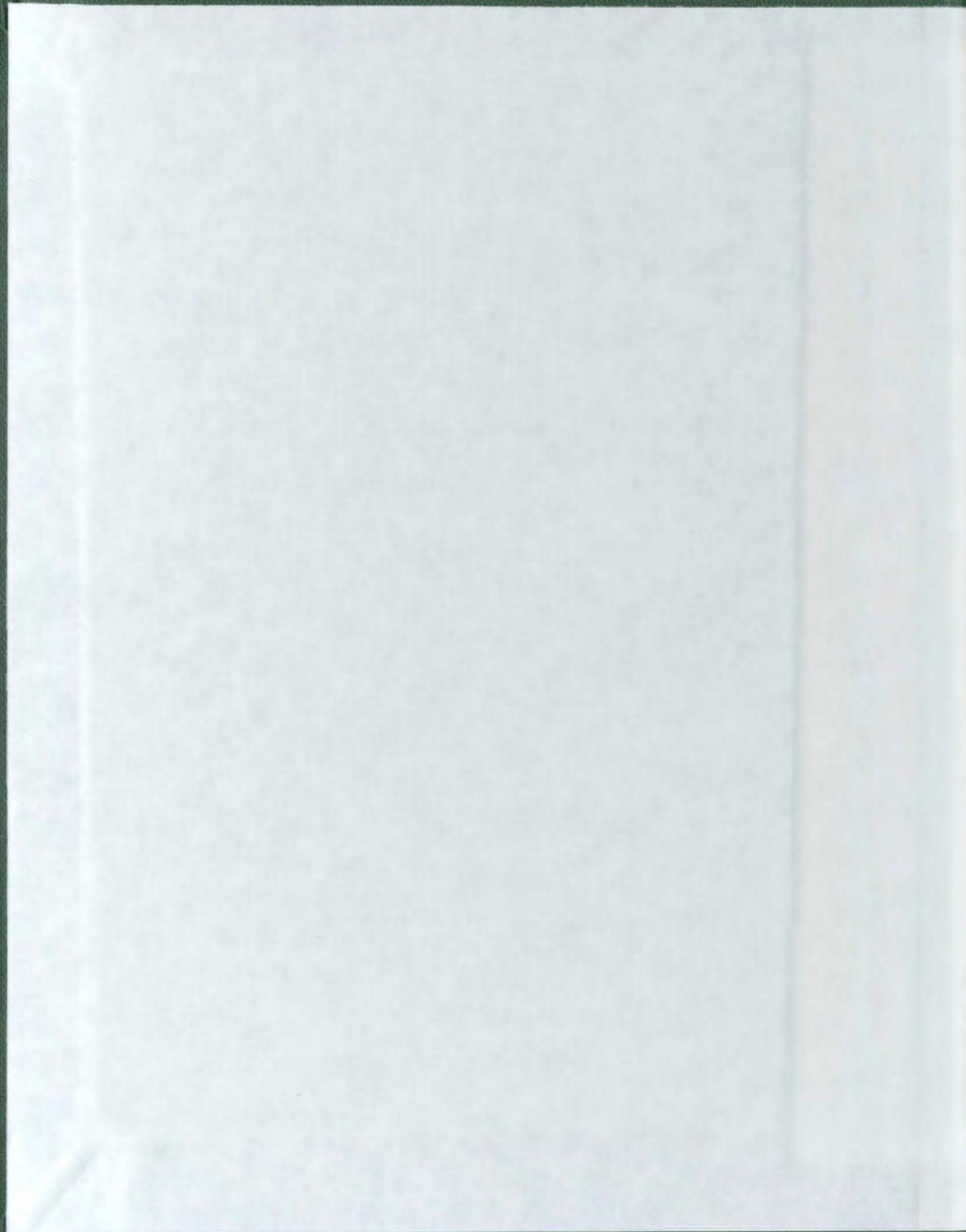# CONCERNING CO-OPERATIVE EDUCATION AND SCHOOL

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A STUDY IN EDUCATIONAL MOTIVATION:

STUDENTS' MOTIVATION RELATED BELIEFS CONCERNING

CO-OPERATIVE EDUCATION AND SCHOOL

by

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-Abstract-

In Newfoundland and Labrador schools there is a mode of delivering the curriculum which enables students to experience the world of work while still in high school. Co-operative education is a course of study that gives hands-on-training while connecting school curriculum to work skills. This study investigates the relationship between co-operative education and student educational motivation by investigating five motivational theories.

The investigation was designed and conducted using a framework based on five theories, namely: B. Weiner's (1990) Attribution Theory, E. L. Deci and R. M. Ryan's (1985a,) Self-Determination Theory, C. Dweck and E. Elliot's (1988) Goal Theory, M. Covington's (1984) Self-Worth Theory, and A. Bandura's Self-Efficacy Theory (1977). One hundred and sixty-nine co-operative education students from twelve high schools on the Avalon Peninsula volunteered to participate in the study. A qualitative methodology was used to conduct the focus group sessions and to analyze the data collected during the sessions.

The intent of the study was to determine if the co-operative education structure was different than a traditional classroom structure, what effects co-op has on student motivation, which elements of co-operative education influenced student motivation, were the learning experiences at a co-operative education placement different than the learning experiences in a traditional classroom setting, were these differences in the learning

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experiences due to the program's structure, the co-operative employer or the co-operative teacher. During the investigation the five educational motivational theories' confirmed that co-op was a mode of delivering the curriculum that fostered and enhanced student motivation and that this mode of delivery was structured differently than the traditional classroom activities. The findings confirmed that the co-operative education experiences obtained at the workplace influenced the students' educational motivation. Ninety-seven (57%) of the students reported that the combination of co-op program, the co-op placement and the co-op teacher had the greatest influence on their motivation while fifty-nine (32%) students replied that only the element of co-op placement had the greatest influence on their motivation. The remaining seventeen (11%) co-op students responded that the co-op teacher/monitor had the most influence on their motivation. It became evident during the study that there was a significant relationship between the motivation research and the elements of co-operative education.

One hundred and sixty-nine students reported that their learning experiences and behaviours were different at the work place than in school and these differences allowed the students to change their attitudes and behaviors towards learning and achieving in school. Students reported that they needed to have the same type or similar learning experiences in school.

One hundred and sixty-two students reported they had a positive learning experience and the seven who disclosed their placement was not a great place to learn did not tell their co-operative teacher because they wanted to stay at the placement for various

personal reasons. The students who had a positive learning experiences reported that the reasons were many, however, all students agreed that the following reasons were very important to a positive learning experience: how the teacher/employer taught the tasks and skills, the positive attitudes of their employers and teachers towards students' success/failure, self-worth, self-efficacy, and self-determination, and the positive role modeling that was evident by both teachers and employers. It did not matter if the experiences were at the placement with an employer or in the integration sessions with the teacher, what mattered was that the learning experience needed to have teachers/employers that had a positive attitude and a learning environment that fostered confidence, belongingness, value and worth.

Seifert gave me I do not believe that my learning would have been as enjoyable or as meaningful. During my two years of study I developed many wonderful insights into educational motivation. Many of these ideas I have actually applied to my own teaching. Thank you, Dr. Seifert.

I would like to thank all my immediate and extended family and friends for their support and understanding during the last two years. Without their support and hugs I would never have been able to finish this study. I think my dad, if he was still alive, would say, "you work too hard, don't let yourself get rundown". Well dad, I did it, but it was not an easy task. It was a very challenging one and I know if you were alive you would have given me all the hugs and encouragement I needed. However there were many people willing to give me hugs and nurturing. My mom was a wonderful role model, she taught me that if you try hard and work hard and learn all you can, you will succeed. Thank you mom. My siblings always understood why I could not always be there and they always tried to encourage me to do my best. All the friends I called on to help me were always there with support and a kind word. Thank you all.

Finally, I would like to thank my husband Fred, who was with me from the beginning of my university life. It was his belief in my abilities that encouraged me to start an undergraduate degree in the summer of 1985. It has been a long time coming but we have made it. During the past thirteen years I have grown in many ways, but I believe that my teaching career has been the fulfilment of a dream. Thank you so much, Fred, for believing in me enough that I started to believe in myself. This is your study also. You

have been a role model since we met and your love and support was all I needed. Thank

you.

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CHAPTER 1

INTRODUCTION

The purpose of this study was to investigate the relationship between co-operative education (from this point on co-operative education will be written as co-op ed or co-op) and educational motivation by examining the following five theories of motivation: self-efficacy, attribution, self-worth, self-determination, and goal. Co-op is defined as an experiential mode of education that provides practical and academic learning experiences needed to help gain success in the transition from school to work or to post-secondary education. Co-op also provides an educational institution the opportunity to form a partnership with business, industry, and the community. These co-op placements are screened by the co-op teachers before any student starts a learning experience. For this study the placements ranged from a student working as a gas bar attendant to a student developing a space program experiment that she took to NASA.

To accomplish the investigation a qualitative study was used to interview one hundred and sixty-nine co-op students in twelve schools on the Avalon Peninsula in the province of Newfoundland and Labrador. The research was undertaken to answer the following questions:

1) What effects does co-operative education have on students' educational motivation?
2) Which elements of co-op influenced students' motivation.
3) How are co-op programs structured differently than traditional high school ?
4) How are the learning experiences at a co-op placement different than the learning experiences in a tradition classroom setting?

5) Are the differences in the students' learning experiences due to the co-op programs, the co-op employers, the co-op placements, or the co-op teachers' practices.

Overview

The Senate Committee on Youth (1986:62) indicated that there needs to be a smooth transition from school to work for the students who do not go on to any form of post-secondary education. The report goes on to state that:

> Teachers and people from business and industry should be involved in a mutual exchange of on-the-spot experiences and information in order to better inform youth and themselves about existing opportunities. Co-operative education programs should be encouraged and expanded to involve the greatest number of young people possible.

Therefore, in the fall of 1991, ten high schools across the province of Newfoundland and Labrador participated in a pilot project with the federal and provincial governments to incorporate into the high school curriculum a way for students to develop a smooth transition from school to work. This project was a mode of delivering the curriculum known as co-operative education which, for the last seven years, has seen an increase in the number of programs and students enrolling in the various subject and career based co-op programs.

These first ten Newfoundland high schools entered into various co-operative partnerships with business communities, provincial and federal governments, parent advisory committees and school boards. All partnerships had one common goal: linking school and its learning activities to the world of work, and its skills and tasks.

According to a study conducted by Fedorak (1992), "co-op programs impact educational motivation for several reasons" (p.47). However, when Fedorak asked students what the main reason was for the impact on students' motivation, they reported " it was an awareness of the success achieved by former co-op students" (p.49). Fedorak's study found:

> Overall, students achieved higher in [co-op] than in their other classes. A comparison of the marks in [co-op] to the marks in the other classes indicated that they scored approximately 17% higher in [co-op]. Furthermore, attendance records indicated that the students missed, on an average, four more classes in other subjects areas than in [co-op]. Also, the students in the group interviews generally agreed that they were more diligent in [co-op] then they were in other classes. Students reported that the success they experienced at the work placement greatly impacted their motivation towards success in other school subjects and on their overall learning. They also reported that the types of behaviour in the work place were transferred to their school classes and co-op skills helped them see the importance for life-long-learning and success. (p.50)

This study proposes students' motivation is influenced by co-op because the program is structured differently than regular classrooms, and these structures incorporate several motivational theories. Students see the meaning for learning at the placement and this meaning is transferred to other courses in school, the learning experienced at co-op is different than the learning experienced at school, and co-op programs have certain elements that influence students' motivation. The study puts forth the following reasons why co-op influences student motivation. These reasons are taken from the researching findings of Weiner's (1990) attribution theory, Deci & Ryan's (1985a) self-determination

theory, Dweck & Elliot's (1988) goal theory, Covington's (1984) self-worth theory, and

Bandura's (1977) self-efficacy theory:

1)   co-op students are given choices to study in the world of work;

2)   integration sessions link school subjects to work skills allowing students
      choice and autonomy over their learning activities;

3)   students explore, experience, and enjoy relevant, meaningful learning
      opportunities while working in the placement;

4)   students engage in experiences that foster self-esteem and self-confidence,
      independence and mastery;

5)   co-op teachers and employers influence students learning motivation
      through role modeling and encouragement ;

6)   co-op programs foster performance mastery competencies;

7)   co-op classes are structured differently than regular classrooms and this
      structure fosters motivation.

It has been hypothesized that co-op students experience success through mastery

learning because students are given a number of relevant, meaningful tasks to complete in

their fourteen week placements. It is postulated that one of the positive effects of co-op

on students' motivation is the relevant relationship between the five theories of motivation

and the activities and tasks developed at co-op work sites.

Background for the study

Educational partnerships, experiential learning, formative education, work

education, internship, job shadowing, work experience, and co-operative education are

terms used to describe programs which attempt to develop job related skills and

knowledge required by students. For the purpose of this study, the program co-op education (co-op) will be investigated to determine what elements of the program influence student motivation. Co-operative Education is an experiential method of learning that is intended to integrate a student's in-school program of study with a community-based training station for learning. Co-op provides students with an opportunity to apply classroom theory to a realistic hands-on-experience. An effective co-op program provides an opportunity to extend the classroom into a community laboratory experience, where the students are given individual curriculum plans (Barnes & O'Connor, 1987). In many high school classrooms in Newfoundland and Labrador, students ask teachers " Why do we have to study this particular subject, what is the purpose of learning this objective?" Students want to know how school subjects and classroom activities relate to their future work and educational experiences. Schools, in cooperation with teachers, employers, parents, and students, enter partnerships that develop work activities based on particular school subjects or career tasks.

In a subject-based co-op, the teacher, employer and student use the objectives of a particular course to develop specific tasks and skills for the work place component of a co-op program. By achieving the link between specific course objectives and work tasks, students become aware of the importance a particular subject in school has to the tasks in the world of work. These students find relevance, meaning, and value in school subjects by engaging in work skills and placement activities (Barnes & O'Connor, 1987).

Students may also enter into career exploratory programs. Students explore one, two or three careers in a semester. While exploring a career, students may uncover the fact that a particular career is not what they want to do after graduation (O'Keefe, 1994).

The Newfoundland and Labrador co-operative education program

Both forms of co-operative education as they are applied in Newfoundland and Labrador have elements in common. Each student in a co-op program must complete at least two hundred hours of work at a placement, thirty hours of pre-employment instruction and twenty hours of in-school integration (linking school to work). For most schools, the students' core subjects are scheduled in the morning while co-op is scheduled in the afternoon. Students who enroll in co-op usually complete fifteen credits in one year and co-op courses approved by the department of education are locally developed programs that provide students 3 credits for graduation purposes. These credits may bea level II or level III and students earn one level I credit for co-op 1100, and two level II or level III credits for 2220 or 3220. The credit level depends on which form of co-op a student chooses (subject-based is a level III credit, while career-exploratory is a level II credit) (Department of Education, Newfoundland and Labrador Curriculum guide and descriptions, 1997).

At the work place, each student must be monitored at least once in an eight day period by the co-op teacher and every student must have an individual training plan (ITP) based on pre-determined objectives. As well, all co-op students have to return to school one afternoon per week for integration sessions. During these sessions in subject-based

co-op, teachers and students make links between job skills learned at the site and the co-op subject's objectives. If the co-op program is career exploratory, then teachers connect careers to various subjects. Each student is responsible for completing a thirteen week portfolio consisting of journal writings by the student with responses from the co-op teacher.

Certain criteria are set when a co-op program is developed. These criteria concern attendance, attitude, teacher references, academic performance for certain co-op programs and prerequisite courses for subject-based co-op programs. Based on the set criteria, the co-op teacher and administration select the students that will most benefit from the program. If students wish to be considered for a co-op program, they must first complete a detailed application form in the previous school year. Each student must have a personal interview with a panel of interviewers. Students are assessed based on the above criteria, personal interview, and application form. Any student may apply for co-op; however, if students do not meet the above guidelines and criteria, they may not be accepted into the co-op program. However, if the administration believes that students who do not meet the criteria will benefit from co -op by developing skills and competencies that will help them function better back in a school, then these students may be accepted into the co-op program.

After the selection process, a parent night is arranged for the successful students. During this information session all parents/guardians must fill out a permission form and be willing to take responsibility for the travel arrangements for the out-of-school

component. The school is responsible for informing the parents about the importance of student commitment, the details of the program, insurance policies, the training site and the employers' roles.

All co-op students participate in a thirty-hour module that describes the goals and objectives of the employers' training site. Students complete an intense self-assessment inventory which focuses on the talents and abilities they have acquired through classes and life experiences. Students learn how to write resumes and cover letters, and how to develop successful interview skills. Employer expectations, new employer syndrome and safety on the job are also discussed. The co-op teacher must find suitable placements for all students. Students' requests are matched with job sites that will facilitate achievement of the goals and objectives of a subject-based or an exploratory co-op. It is at this point that parents, community agencies, personal contacts and an effective Advisory Council are helpful to the program. Teachers must take great care to ensure that employers offer what students need in order to have a successful educational experience. Teachers must inform the employers what is required from their training site, and what they will gain from their participation.

Co-op programs are structured differently than many regular courses, in that students are given the opportunity to find meaning, value, relevance, and motivation by applying school objectives to work skills and for many students this is of great benefit. Co-op programs encourage students to engage in challenging tasks, reflect on prior knowledge or experiences, link academic domains to skills at work, and integrate high

school to continuous learning. Michael Bloom (The Conference Board of Canada Partnerships Award Ceremony, 1993) reported that employers benefit from partnerships, such as co-op programs, because businesses and industry establish contacts with various schools and youth, develop partnerships that enhance their participation in the training process of future employees, and organize an excellent list of trained part-time help for future consideration.

At co-op work-sites, students are given a number of tasks to complete in their fourteen week job placement which are generic, specific to groups of jobs, and specific to the placement. Many of these tasks are linked to specific course objectives or specific career duties. Students are shown how to do a task, then given the opportunity to engage in the task with assistance, perform the task under supervision, and eventually are allowed to perform the task on their own. The co-op students are motivated to learn more challenging skills because they have developed a sense of belongingness and value for the placement (Covington, 1984) and have attributed success and failure to controllable behaviours (Weiner, 1990).

The participants in this study defined educational motivation as the force that drives them to learn or not to learn, therefore for the purpose of this study motivation will be defined as a set of beliefs that manifest themselves through the students' behaviours in school or at a co-op placement. The researcher used tenets from the following five theories to develop a more comprehensive definition for the study: self-efficacy,

(Bandura, 1977); self-worth, (Covington, 1976); self-determination, (Deci &Ryan, 1987);

goal, (Dweck, 1986); and attribution (Weiner, 1984).

Description of study

Shaughnessy (1985), in her City of York study found that a significant positive

change in co-op students' motivation increased the number of these students going on to

post- secondary institutions, Shaughnessy found a significant positive change in the area of

students' self-esteem. Irvine & Irvine (1985) reported that

> co-op ed has become one of the major curriculum alternatives in American
> education because co-op better prepares students for participation in the
> labour market, increases student motivation by allowing them to perceive
> connections between jobs they want and material taught at school, helps
> students develop a greater dependence upon their own judgements,
> improves their interpersonal skills, reduces the number of dropouts, and
> employers find co-op a very useful recruitment tool. (p. 235)

These studies' support the purpose of this study, in that they found evidence to support

the premise of this study, namely that co-operative education programs affect students'

motivation. It is very timely to be researching co-op programs now because the number

of high schools offering co-op programs is being reduced even though many of

Newfoundland and Labrador's high school students participating in the various co-op

programs found throughout the high school curriculum. It is the intent of this study to ask

students if co-op affects student motivation, what elements of co-op enhances motivation

and why and how is co-op structured differently than traditional classroom activities?

Limitations of the study

The sample group was comprised of co-operative education students, which limited the generalization of the findings to all students. The researcher was a co-op teacher; although every effort was made to eliminate subjectivity, it is possible that students' perceptions and interpretations of their responses could have been biased in this study.

The data was collected over the course of the various co-op programs, and each interview was conducted at a different place and time in the co-op program. Therefore, findings may vary because of this time difference. The students' perceptions of the qualities which make teachers effective were based on the role modelling of co-op teachers. Consequently, the generalization of findings to the overall teacher population may be limited.

Significance of study

The study identifies the importance of the co-op placements to various students' behaviours and educational motivation in various co-op programs. Students' comments and recommendations may also have implications for the restructuring of the department of education's high school curriculum.

Organization of the thesis

This chapter discussed the importance of the study, explained how co-operative education works in the province of Newfoundland and Labrador, and introduced the

importance of motivation in the province's school system. The next four chapters will be divided in the following way.

In chapter 2 the research findings of five motivational theories are presented. Attribution, self-efficacy, self-worth, self-determination, and goal theories will be linked to co-operative education. The contents in chapter 3 reports the research methodology used in the study. In chapter 4, a narrative description and analysis of the participants' perceptions and interpretations of co-op education and educational motivation are presented and explored. In chapter 5, conclusions from the study and recommendations based on the findings for further research and high school reorganization are discussed.

CHAPTER 2

LITERATURE REVIEW

This chapter outlines the five theories that were used as the underpinnings for the investigation: theories of self-efficacy, attribution, self-worth, self-determination, and goal. Each theory is explained as an individual theory, and linked throughout the explanation to the practices and ideas of co-op education, and then the theories are integrated so as to make the connections to educational motivation.

Self-efficacy theory

Self-efficacy theory refers to the beliefs students hold regarding their capabilities to perform a given task in a course of study. Students enter into class activities with various aptitudes and prior experiences which affect their initial sense of self-efficacy for learning. According to Schunk (1985),

> During task engagement, students may assess self-efficacy by utilizing cues
> made cognitively salient by educational practices and which convey
> information about their capability to acquire knowledge and skills, such as
> performance outcomes, attributions, situational circumstances, outcome
> patterns, perceived model similarity, and persuader credibility. In turn
> heightening learning self-efficacy enhances motivated learning, or
> motivation to acquire knowledge and skills. (p.208)

Bandura (1977a) hypothesized that personal judgements regarding performance capabilities had a diverse effect on achievement performance, motivation, self-worth and choice of activities. According to Schunk's (1985) study, students who maintain a low self-efficacy may avoid tasks that are seen as challenging or difficult, and students who are highly efficacious may be more willing to face difficult and challenging tasks.

Schunk proposed that "as persons engage in activities, they notice the differential consequences of their actions"(p.511). Therefore, students learn which behaviours lead to positive performances and which lead to negative performances. This information will guide future performances. Students' efficacy beliefs are acquired (Bandura, 1982b) from information regarding previous performance accomplishments, vicarious experiences, social patterns, past evaluations, teachers' expectations and interpretations of physiological states. These self-efficacy beliefs may manifest themselves through students' appropriate and inappropriate behaviours and may result in novel or unpredictable features of behaviour (Bandura, 1982b). Schunk (1985) concluded in the study that a student's positive self-efficacy will enhance motivated learning. This study is important to co-op and motivation because in an Irvine & Irvine study (1985) "co-op students, throughout the United States, believed that their judgements were reliable and necessary for their success" (p.236).

Educational programs that send students into the world of work while still in school may enhance the students' performances in school. Students in these programs, according to Schunk, may develop a stronger sense of self-efficacy by experiencing positive learning outcomes in the real world and this self-efficacy may enhance motivated learning. In co-op placements, students are interacting with potential employers and workers and this interaction may help build their competency judgements because they are experiencing positive cues about their performances. Co-op may enhance students' self-efficacy by linking what is taught in school to what is happening in the world of work.

Schunk (1985) proposed that outcome expectancies and self-efficacy are often related because students who perceive themselves as capable of performing well expect positive reactions from teachers or other adults. The words of encouragement and support supervisors and workers offer students are the cues needed to develop a positive self-efficacy. Therefore, co-op students may develop a high self-efficacy for their present and future capabilities through valuing their own efforts, choosing their own tasks, reinforcing their beliefs, and from fellow employees and supervisors informing the students of their capabilities and performances (Schunk, 1983).

In co-op, students engage in activities and tasks that have consequences which Bandura (1977b) proposed reinforce, inform, and motivate future learning. Students, employers, and teachers develop tasks that will suit the students' past experiences, abilities, and future career aspirations. Co-op students develop a positive attitude towards learning that fosters elements of self-efficacy. This exposure to the workplace manifests itself during the balance of the students' schooling because they have developed a sense of pride in what they have accomplished on the job (Fedorak, 1992). These co-op students, according to Schunk, (1985), are developing their self-efficacy during learning which may enable students to develop motivated learning.

When students have real adult work successes and attribute these outcomes to their effort on the job, their self-efficacy increases (Bandura , 1982b; Schunk, 1984). Results from Schunk's (1985) study found that efficacy cues come from performance outcomes and these cues exert important influences on students' self-efficacy. Many co-

op students experience success at the placement, which fosters self-efficacy and influences

their motivation (Schunk, 1985) to learn new and challenging tasks and, become involved

in the everyday workings of their placements. However, when students experience failure

on the job, the situational circumstances may be embellished by giving the students more

training and supervision until they can achieve success. According to co-op students'

journals and reflections (Fedorak, 1992), these students usually do not equate job failure

with failing grades, but with modifying and adapting their learning practices and strategies.

These positive efficacy cues given by employers and co-op teachers attribute

accomplishments to effort and competency, not solely to ability (Irvine & Irvine, 1985).

According to Schunk (1985) there are many efficacy cues, and these cues are

stored in students' memories. If this is the case, students who spend two hundred hours in

the work force may develop (through efficacy cues given by employers) adaptive practices

to learning that are reinforced by success and not by the need to avoid failure. Students

know from the beginning of the course they will be entering into a new way of learning.

This learning experience may maximize the likelihood of success, which in turn, may

foster self-efficacy and influence their motivation (Schunk, 1985) to learn new and

challenging tasks, and become involved in the notion of life-long-learning.

The efficacy cues that come from co-op may not always be present in the regular

classroom. This may occur for various reasons, including lack of knowledge regarding

students' self-efficacy, not enough time in the regular classroom schedule, or judgements

about competency not being seen as an important issue for a classroom (Irvine & Irvine,

1985). Therefore, students may have a difficult time engaging in activities and tasks that have immediate responding consequences which Bandura (1977b) proposed reinforce, inform, and motive future learning.

When students are not exposed to information regarding prior or present accomplishments, self-efficacy beliefs may not develop and may result in unpredictable behaviour (Bandura, 1982b). Nisbett and Ross (1980) noted that in making judgements people rely on two general strategies, availability and representativeness. Both of these strategies are available in co-op because of the tasks developed in the individual training plan (O'Keefe, 1994). Students are given cues and information regarding performance immediately during and after each task. Students are then able to make judgements regarding specific performances and successes and/or failures. However, these same strategies may not always be available in the regular classroom due to lack of time, specific test rules, or human resources.

Motivated learning develops over time from the interactive relationship between self-efficacy and learning experiences. Two of the many ways learning takes place in a co-op experience is through verbalization of the tasks and observation of modeling by employees. A student observes and listens to a supervisor or another employee while they attempt to successfully complete the learning task. Schunk's (1984) study found that children who observed division skills through modeling and cognitive verbalization developed higher mathematical skills than children who were not given the cognitive modeling. Bandura's (1977b) study found that models illustrate how determined effort

and positive self-thoughts can overcome difficulties. Coping models can enhance

subsequent performance by observers better than mastery models can (Meichenbaum,

1971). However, in many of our classrooms the modelling that must occur for the

development of self-efficacy is not always present. In such classrooms students have no

way of determining the positive cues because the appropriate behaviours or skills were not

modelled.

However, the employers who participate in co-op education have time and skill to

use modelling and observation techniques to train the students. Often times, employees go

through how and why they engage in certain learning behaviours and activities for the

students. In the development of the co-op ITP's, it is mandatory that employers model

the task first and explain the whole procedure to the students. Teachers in the traditional

classroom may not always have the time to model or explain in-depth why they are doing

an activity, or how they accomplished the task. Students, through their journals,

(O'Keefe, 1994) report that this modelling by workers was so important that they want

more of it in school.

It has been hypothesized that modeled self-confidence can promote self-efficacy

(Zimmerman & Ringle, 1981). Many co-op students, parents and employers report in

their journal writings and evaluation forms (Fedorak, 1992) that one of the most important

changes that occurs while students are at the placement is the development of the

students' confidence. If this form of training can instill and maintain self-confidence (it

has been found that task confidence can promote self-efficacy) then it would be beneficial

for students to engage in co-op education so as to develop self-efficacy. When students

perceive that they are capable of doing well they will try more challenging tasks, there by

assimilating effort as a way to master the tasks (Schunk, 1985).

Once students experience the goals that enhance specific mastery standards, then

according to Locke et al. (1981) these students are more likely to increase their

motivation and activate their need for self-evaluation. In our regular classrooms students

who experience failure are given little time to relearn or retry their failures. Therefore

their attributions regarding their failure will be focused on their ability (Weiner, 1990).

However, if students are given the cues to establish the links between judgements,

feedback, modelling, competency, performance, and ability they may develop over time a

sense of self-efficacy (Rohrkemper & Corno, 1988).

Students' self-efficacy depends on the judgements they made regarding their prior

and present performances. In the co-op placement, students are engaging in making their

judgements regarding self-efficacy, in that, understanding any failed performance is

necessary for employees to succeed at the placement. Students are encouraged to retry

difficult tasks at their co-op experience. If allowed to experience this form of learning,

retrying the failed tasks may develop, even increase, a student's self-efficacy. Students

may develop high self-efficacy if important feedback regarding their performances is

shared by adults in the placement, eager to help them gain meaningful experiences.

Competent individuals begin an activity concerned about learning and they react

more strongly to the feedback they receive at task completion (Harackiewicz, Abrahams

& Wageman, 1987). The individual training plans that are developed for co-op students, direct employers to give feedback during and after each task, and they are instructed to inform students how and why they may have failed a particular task. Therefore, co-op students are immediately aware of their competency performances which, according to Harackewicz, Abrahams & Wagenan (1987), have a positive effect on anticipated performance and beliefs about capabilities. Each co-op student has an individual set of tasks that are developed from an assessment of what the student's capabilities are for a job's outcome. For example, (taken from a computer company's individual training plan) a computer co-op student may have the following basic entry level outcome:

> an employee in this company will be told how to label all the components
> of the work station, practice how to label a work station and be competent
> in labeling a work station before completing another task.

Again, in a regular classroom individual attention may not always be available. Students and teachers are not always able to develop such a detailed individual training plan and for many classrooms the thirty or so students are taught one way, while feedback may come in a verbal comment or a number/letter grade. However, co-op students are aware through the wording of the outcome that it is not a grade evaluation that matters but their capabilities.

Harackiewicz, Abrahams, & Wageman (1987) proposed that students who are not focused on evaluation per se, but on capabilities value competence more highly than students who concentrate on only grade evaluation. According to Schunk (1983) these

students develop a high sense of competency which, in turn, influences self-efficacy and motivation. As students observe their progress (an accumulative process in co-op education performance evaluation) they develop "a heightened sense of efficacy, which should help sustain task involvement and lead to greater skill development" (Schunk, 1983, p. 511).

Students who have a high self-efficacy are more likely to attack challenging tasks (Schunk, 1985). In many co-op placements, once students have accomplished one task successfully, they are encouraged to attempt more challenging tasks because of their own successes and their supervisors' confidence and encouragement. Although this encouragement should also happen in school, many students discussed in their co-op journals that words of encouragement and modelling are sometimes missing when they return to school and this causes them to feel less confident about their performances (Fedorak, 1992).

Self-efficacy theory espouses that students with high self-efficacy are encouraged to engage in challenging tasks for the sake of learning. Co-op students who experience building of competencies, through immediate feedback, will increase their beliefs regarding their competencies which, in turn, will increase their likelihood to attempt more challenging tasks which heightens self-efficacy which influences educational motivation.

According to Bandura (1977a), students make certain judgements regarding their academic performance and achievement capabilities is very important to the students and the teachers. These judgements can affect students' learning because students who feel

they have no chance of performing well will find ways and means to avoid the work

(Bandura, 1981). When educators are not aware of the judgements students make

regarding their self-efficacy, can these teachers help students change low self-efficacy to

high self-efficacy, which in turn will enhance or change students' educational motivation?

The question for this study for self-efficacy is how does co-operative education influence

change in students' self-efficacy and in turn, educational motivation?

Attribution theory

The next motivational theory to be reviewed is attribution theory. The guiding

principle of attribution theory is that individuals search for understanding, seeking to

discover why an event has occurred. An attribution may answer a student's why question,

"Why did I fail"?, "Why did I pass"?, Why does my teacher hate me"?, "Why does my

teacher like me"? "Why am I stupid"?, "Why am I smart"? "What is a fail in this teacher's

course"? As is evident, these questions address one issue, *the cause* of something.

Research (Folkes, 1982) has developed quite a number of reasonable speculations that

account for the instigation of a causal search. Some of the more probable reasons for

finding causes may be to "reduce surprise, uncertainty, stress, to aid in the attainment of

future success or to eliminate future failure" (Weiner, 1984, p.19). A casual search is not

necessarily confined to one domain and the number of perceived causes is infinite.

However, for educational purposes, the causes of success and failure depend upon

particular activities, achievement situations, ability, motivation, difficulty of task,

expectations, attitude, emotions, physiological factors, and others (Weiner, 1984).

Heider (1958), in one of the first models of attribution, espoused that "the

principle of balance" is to predict that good outcomes (success) would be attributed to

the self (internal-ability) when there was positive evaluation, but would be attributed to

some other reasons (external-luck) if there was a negative (failure) outcome. In another

balance, negative outcomes would be attributed to self when there was a negative

evaluation, but would be attributed to other reasons if there was a positive evaluation.

However, in a second model, Heider (1958) proposed that an outcome of an action was

related to a person's "internal" and "external" environments which may be perceived as

stable or unstable. These two beliefs are still used today in a more refined theory of

attribution put forth by Weiner (1985).

"A theory of motivation ... is proposed in which causal ascriptions play a key

role"(Weiner, 1985, p.548). "Psychoanalytic and Hullian theories may be the two most

historically influential motivational theories,... However they do not provide the needed

conceptual tools to explain classroom motivation" (Weiner, 1984, p. 16). Subsequently,

Weiner proposed that a theory of motivation must incorporate "three general canons: a)

full range of cognitive processes; b) a full range of emotions; and c) explain rational and

nonrational actions, using the same concepts for both" (pp. 17-18). In a 1990 paper,

Weiner proposed that a motivational theory must be based on " causal ascriptions, efficacy

and control beliefs, helplessness, and thoughts about the goals for which one is striving"

(p. 620).

"When students succeed or fail at tasks, the degree to which they attribute responsibility for the outcome to ability or luck depends upon their initial expectation of success" (Feather & Simon, 1971, p. 173). If students are constantly failing and believe that it is their intelligence that caused this failure, they will expect to fail time and time again. Feather & Simon also concluded that if students were "initially confident, then they tended to attribute success to ability and failure to bad luck. But if they were initially unconfident, then they tended to attribute success to good luck and failure to ability" (p.173). Therefore, it is important to ascertain what attributions students hold regarding their successes and failures and how these attributions differ between traditional classes and co-op classes.

It is natural for students to reflect on why they passed or failed a test or quiz. Achievement is deemed very important in our school system and this drives the pass and failure attitudes in students' perceptions. The most dominant causes of achievement are ability and effort (Weiner, 1985). Many successes are attributed to high ability or hard work while failures for many students are attributed to low ability or little work. Research has proposed many reasons for success and failure; however, one of the components of Weiner's theory is locus of control.

A student who believes failure is due to ability and continues to experience failure will develop an attribution that is stable. For example, a student who fails at mathematics and attributes failure to ability (stable-internal) will expect to fail at that particular subject given the opportunity and a learned helpless behaviour (I am stupid, therefore I cannot

succeed) may occur. On the other hand a student who fails at math and attributes failure to effort (unstable-internal) will likely exercise more effort for the next performance and will not believe that he/she is stupid (Craske, 1988).

If students perceive they have control over their successes and failures then they will be more likely to develop certain expectancies for future successes and failures (Craske, 1985). When students experience success or failure on a quiz and attribute this success or failure to a stable variable such as intelligence or ability , more than likely the students will expect the same success or failure in the future. However, if the students attribute their success or failure to an unstable variable such as luck, or easy test, then the students will expect that the success or failure will not necessarily happen again (Weiner, 1984).

Attributing failure to lack of ability, according to Dweck & Leggett (1988), will be debilitating to students because they will perceive that they are stupid and, over time, may develop techniques to avoid failure. Many of the co-operative education programs are structured in such a way so as to enable students to understand their past beliefs towards failure. The ITPs developed for the job site advocate that failure may be an important part of skill development. During the pre-employment component, the ITPs are developed and one component is to inform supervisors and employers of the importance in developing appropriate beliefs concerning success and failure on the job. The ITPs, through the learning outcomes, instruct employers to continually monitor the students' performances in such a way as to focus on the students' progress through the tasks, not on the final

outcome. Students are given many chances to observe the various tasks so as to ascertain what skills are needed to achieve mastery (Fedorak, 1992).

After the observations students are permitted to attempt the task, with supervision, and to learn that mistakes (failure) are sometimes a necessary component of skill acquisition. Even though this should also be a part of the school's learning process, in many schools today there may not be enough time to proceed through every task in the same way as in co-op. There are no ITPs for the average student in a classroom and many times the task is not even modelled. The emphases for many teachers may be on the learning contents and time limits. Thus, attention and time for retrying a task until it is completed successfully may not always be available.

Also, in co-op, students are carefully watched and prodded along the completion of the task and if the supervisors feel that the students are ready to complete the task, then students are observed while conducting the task. This may not be the case in many classrooms, because there is only one teacher and possibly thirty students. However in a co-op placement there is one student and several employees and supervisors (O' Keefe, 1994). Once the task is completed with the required proficiency the students will be left on their own to complete all the tasks needed for that particular job. Classroom teachers may not always have the luxury of time to engage in this type of observation and assessment. However, this co-op component may be the link between classroom learning and student motivation.

If mistakes are made during the students' completion of difficult tasks, it is important to note that the supervisors must probe the students for reasons for the failure or mistakes. This is so because the ITPs stipulate that all mistakes and reasons for the mistakes must be documented. Then the task is retried until the students feel they have adequate knowledge to attempt the task unassisted. Once these reasons are ascertained, the employers or supervisors will discuss what the students can do to correct these errors. This allows the students to reflect on the cause/s of their mistakes, gather cues, analyze their performances, and adjust their strategies accordingly. If the students believe that the cause for the mistake was lack of knowledge then the supervisors must retrain or readjust their approach to the delivery of the task knowledge. Consequently, the students do not jump to the conclusion "I am dumb or stupid and I can not do this task."

Sometimes the cause for the mistake may be not using the right strategy or piece of equipment. If this happens, then the ITPs requires that the supervisor/employer guide the student to use the right strategy or equipment. Therefore, consistent with Weiner's theory, once students feel they are not stupid and attribute failure to changeable variables, they are more likely to attempt challenging tasks. The completion of these challenges will enable students to develop positive emotions towards failure. The importance placed on an appropriate attribution belief system provides both the students and employers the foundation and framework to develop a theoretically structured, meaningful, valuable learning experience.

Weiner (1984) proposed that students who develop an appropriate attribution belief system will more than likely attribute failure to lack of effort and poor strategy use. Over time many students develop negative and positive affects such as pride or shame, low/high self-esteem, anger, guilt, pity, helplessness, competency/ incompetency, self-efficacy, and self-worth. If students believe they are not competent they may not try to succeed; they may become work and/or failure avoidant or learned helpless (Dweck, 1986). Therefore, allowing students to analyze and reflect on the reasons for failure may enlighten their attribution beliefs. This reflection on failure under supported guidance is one way co-op supports the development of positive attributions.

During co-op, students' experiences regarding success and failure may be viewed differently than in a regular classroom. In co-op placements each student is responsible for the completion of the task and developments from the task. During the performance students, under guidance from employees and supervisors, concentrate on what skills are needed to complete the task, what strategies must be used, and how the completion of the task will affect past and future tasks. These co-op students are given ample time to interpret the reasons for a success and/or failure of a particular task and are given ample feedback during the completion of the task. According to students' daily journals, they developed over time, (208 hours at a placement) beliefs that ability is not the main cause of most mistakes. In fact, many employees and supervisors concentrate on prior skill acquisition, strategies needed to complete the task, and the steps of task (Littlefield, 1985).

Students need to interpret failure or success in positive ways so they can maintain their sense of pride and value (Barker & Graham, 1987). According to these researchers, learning needs to focus on adequate knowledge of the task, good study skills, appropriate learning strategies, and sufficient effort when helping students acquire appropriate attribution beliefs. In co-op, the focus on learning is the task at hand, not on how one achieves success. The students learn to attribute success/failure to prior knowledge, skill, strategies, and appropriate information about the task and effort. During the completion of the task students are given guidance, and, if difficulty is encountered, they are helped along the way with encouragement and advice.

Therefore, according to various researchers, (Rohrkemper & Corno, 1988; Meyer, 1982), co-op students are experiencing cues from outside forces (employers) that may attribute success to the lack of task information or strategies that were not appropriate, and these same cues may emphasize that failure is not necessarily an indicator of low ability. These cues differentiate between ability and effort during task completion and therefore, according to Baker & Graham (1986), enable students to perceive the causes of failure to be changeable. The co-op practices, then, allow co-op students to focus on the task and skill acquisition as being the important elements of learning, not on successes and failures.

Co-op students have been able to adapt positive attribution beliefs which give them the necessary competencies to believe that they are not stupid if they fail at a task from the cues and feedback given by the employers. These cues enable students to determine that

many of the mistakes made at the placement are not because of low ability but because they were not prepared. However, in a traditional classroom the only feedback regarding a failed task may come from a failure on a test and this feedback is not always constructive because the students may not know where they made the mistakes (Ryan, 1994). They are not given the time, in most situations, to go over the failure and retry the task until they have the concept or skill mastered.

Weiner (1990) wrote "the main theories today are based on the interrelated cognitions of casual ascriptions, efficacy and control, helplessness, thoughts about the goals for which one is striving" (p.620.) Attribution theory is linked to self-efficacy theory by this statement and the tenet that capabilities, performances, affects, confidence, and emotions are influenced by perceived attributions of failure and success (Weiner, 1990; Rohrkemper& Corno, 1988; Schunk, 1985, 1983; and Baker & Graham, 1985). These researchers proposed that negative and positive feelings arise when students attribute failure to ability and success to luck. Feelings of guilt, stupidity, anger, and blame decrease levels of self-confidence, self-efficacy and motivation. Therefore, it becomes a question of which one is influenced first: attribution, self-efficacy, or motivation. Whichever theory is first is not of importance for this study; what is important for this study is how all of these elements are connected to the next theory.

Self-worth theory

Tenets of Covington's (1979) self-worth theory espouse that all students, regardless of ability, belong and have value in classroom learning, and that perceptions of

ability are critical to the self-protection process. The theory assumes that a central part of all classroom achievement is the need for students to protect their sense of worth and personal value and they will do what it takes to protect this worth and value. Covington (1984) proposed when self-worth is nourished educational motivation is enhanced. Self-worth theory focuses attention on the need to preserve one's self-worth by avoiding situations that will cause students to look stupid or humiliated.

Given the opportunity many students will act in ways that promote a positive self-identity in order to gain the approval of others and to disassociate themselves from any action or event that might attract a negative judgement. " If students persist and have the training to perform the skills that accomplish achievement then students' self-worth will increase" (Covington & Omelich 1979, p.689). Covington's (1984) theory of self-worth states that "older students perceive ability as the dominant casual factor in achievement. Increased effort will foster self-worth if students see that it is just as important as ability" (p.88). To protect self-worth, Covington proposed that "students need to protect their perceptions of ability. When students are exposed to failure they sometimes try to protect their self-worth by avoiding tasks at which they may fail" (p.89).

According to Craske (1988), past failure can disrupt academic performance, decrease persistence, lower self-efficacy and self-worth. Therefore participation in courses and activities that enhance and foster success may enable students to develop their self-worth and coping skills. Research on co-operative education has shown that students relate failures to unstable controls, increase persistence in more challenging tasks,

and believe they belong and have worth at the placement (Fedorak, 1992). Covington (1984) would propose that this type of learning encourages students to develop a strong sense of self-worth.

Blumenfeld, Pintrich, Mecce, & Wessels (1981) found that virtually all high school students believed that effort is no longer seen as either a precondition or a guarantor of success, and ability alone becomes a sufficient condition for high accomplishment. Covington's 1984 study supported the premise that high effort comes to imply low ability, especially in failure. "Among most young adults, low effort in success is believed to be indicative of brilliance, while low effort expenditure in failure deflects causes away from the stable, internal attribution of ability" (p.91).

One of the most important goals of co-op is to develop students' self-worth through building confidence in completing individual tasks that are related to school, but also related to the world of work and future careers. The emphasis for the co-op ITPs are on successful completion of the student's task, not on a final grade. Covington (1984) argues that "the competitive nature of the traditional classroom achievement process may transform students from being success-oriented to becoming failure-prone and then, ultimately, failure-accepting" (p.91). Therefore, when students participate in co-op as a form of learning they are exposed to an experience that fosters individual success not competitive comparisons.

Another study reported (Littlefield, 1985) that the most important skill students learned at the placement was the importance of developing a sense of worth and the belief

in their abilities. These same students also reported that high school classrooms do not give them enough encouragement to develop positive beliefs about their competencies and achievements. According to Mason & Haines (1972), self-worth, value and belongingness, experienced in co-op, develops students' attitudes towards work. The co-op students are more willing to persist and succeed because they have feelings of worth developed from the value employers place on their performance. Therefore, the students increased self-worth (Littlefield, 1985) may motivate them to stay in school and obtain a high school graduation certificate because they have learned at work that certain skills are needed for gain employment.

In co-op education, students are exposed to another form of learning that focuses on the students' value and belongingness to the placement and their learning is seen in a more constructive, relevant, meaningful light (Mason & Haines, 1972). Students learn that even if they make mistakes they are still valued, and that the mistakes are only setbacks which allow them the chance to develop and enhance their skills. Co-operative education enables students to accept failure by looking upon it as a learning experience and realizing that they are still valued and needed. Covington's theory (1984) suggested that students who perceive that they are needed and valued in the learning environment will not need to protect their worth by shying away from challenging tasks. In fact, they may attempt challenging tasks so as to increase self-worth. Covington stated:

> Clearly, the attributional pattern of success-oriented individuals is positive and uplifting. In effect, success inspires further confidence because it is taken as evidence of one's ability to do well whereas failure signals the

need to try harder. Such an interpretation, even if defensively driven, robs failure of much of its treat. For failure-accepting students, by contrast, it is difficult to imagine a more devastating pattern of attributions: blaming oneself for failure, yet taking little credit for success. (p.94)

For many classroom students this type of attributional pattern may be developed because they are unable to develop the sense of value, belongingness, and worth needed to become success-oriented individuals. Co-op may be a way for failure-accepting students to participate in a learning environment that fosters value for task completion, a sense of belongingness, and worth and a desire to succeed.

Covington(1986) writes "for example, at times even the most reluctant and self-doubting students will strive for success if the task is important enough or if the chances of succeeding are judged high" (p.6). Co-op students may acquire more interest and maturity in a school setting when they have a more realistic look at the work atmosphere (Law, 1970). Students link subject and course objectives to tasks and skills found in the work place and therefore their worth to their employers becomes enhanced which may transfer back to the regular classroom.

In most traditional classes students who experience failure have no way to rectify this condition within an adequate time frame (Ryan, 1994). Therefore, feelings of low self-worth may be developed if the students believe that failure is due to their abilities, and this perception may lead to feelings of inadequacies, humiliation and guilt. These feelings have a negative effect on a student's self-worth. In a co-operative education program students who experience failure on the job are given more guidance and encouragement to try until

they master the task and this is not always the case in a traditional classroom. Students

experience learning at the placement that promotes not only effort, but the importance of

not being afraid to fail. For when employees fail they need to uncover why they failed and

how they can rectify this failure. The students have sufficient time to comprehend that if

they persist with a task and ask for clarification when needed, they may experience

success. This experience with success gives the students feelings of competency, pride

and self-worth (Miller & Hom Jr., 1990).

Self-worth theory espouses that students will protect their sense of worth no

matter what the behaviours may entail. Students who continuously feel valued and wanted

will develop attributions that foster motivation and pride in their accomplishments. In co-

op, students develop a strong sense of worth, pride, and motivation while at the placement

because they are continuously given the opportunities to reflect on their job

responsibilities, value their belongingness at the placement, and complete the task and

skills required to support their fellow employees. Littlefield (1985) states,

> During the co-op programs students develop positive self-worth by
> attaining successful achievements in challenging tasks, which in turn
> enables them to attribute this success to task performance and competency
> and maybe these students may transfer this positive self-worth back to the
> classroom. (p. 4)

Students are given responsibility and relevant tasks which allow them to find value at the

placement. The tasks they engaged in at the placement give the students a sense of worth

and value for their learning. Dweck (1975) proposed that a long-term training procedure

which taught a student to take responsibility for failure and success by attributing success or failure to insufficient effort would enable students to persist and become involved in more challenging tasks, thereby influencing self-worth. This tenet of Dweck's certainly seems to be supported by the co-op students and their work experiences.

As an example, in Littlefield's study (1985), a grade 13 student worked on the development of the Canadian Space Arm at Spar Aerospace. The student (known as 1) reported in her journal that she felt she had a great responsibility at her placement. She felt needed and wanted by all members of the project and her presence and task completions were important to the daily workings of the department and especially the present project. Student 1 perceived her work had value and worth to the overall project and that the other employees on the project encouraged her to put forth her ideas that may influence the outcomes of the project. This student was not perceived as a high achiever in the regular classroom by teachers and administration.

Student 1 reported that her self-worth was very low because she was experiencing failure in all her school subjects and she had developed feelings of stupidity and shame. However, while working at the co-op placement, Spar Aerospace, she experienced success with her initial tasks and therefore persisted with future challenging tasks. This experience may have given her value and a sense of belongingness to a team, and because of this her confidence and self-worth increased and she reportedly returned to school, upgraded her marks and received a scholarship to pursue her scientific interests at a well established university (Littlefield, 1985).

Another grade 12 student (known as 2) in the study was in the general stream at his school. During his placement, he learned how to operate a $150,000.00 machine. In order to operate the machine unassisted, he had to understand a scientific computer program and high levels of trigonometry. Student 2 reported in his daily journals that he believed his work and tasks were very important to the overall workings of the company. His sense of value and responsibility for his own learning was so intense and uplifting that he tried a number of extremely difficult tasks. He could not believe his skills were such that he experienced success in all of his tasks. He reported that it was the constant guidance and encouragement that fellow employees and supervisors gave him during the tasks enabled him to develop his competencies and skill mastery.

Before the co-op experience, student 2 had obtained a grade 12 certificate from school and said, "I never wanted to step foot inside any school again." However, upon completing his co-op placement he returned to school for grade 13 and enrolled in special mathematics and computer courses needed to become a machinist or engineer. He reported that his co-op experiences with success, achievement and skill attainment gave him the confidence and self-worth he needed to engage in more challenging tasks which, in turn, influenced his decision to return to school and study for a profession. As a matter of fact, he was asked to take a part-time job at his placement while he attended school. He came to believe he was capable of achieving and performing at any class he took and he could also go on to higher learning. These students reported that their co-op experiences

gave them the self-worth and confidence needed to be motivated to return to school and pursue further education and success (Littlefield, 1985).

The co-op students were given a chance to experience responsibility for their learning, develop feelings of value and belongingness, and achieve challenging tasks while learning (Littlefield, 1985). When students return to the regular classroom (after their co-op experience) they may try to incorporate these positive feelings of worth into the classroom setting. Co-op teachers tend to understand the importance of the positive influences, responsibilities and relevant experiences have on self-worth and these teachers try to focus many of their integration sessions (in-school activities) on these self-worth tenets.

The connection of self-worth to self-efficacy, attribution and motivation is evident in the theory itself. Self-efficacy and attribution theories espouse that positive feelings attained through beliefs regarding capabilities to perform tasks, and sound appropriate reasons for failure, will foster and grow when students do not perceive themselves as stupid or inadequate (Bandura, 1981; Schunk, 1985). Students (Harari & Covington, 1981) who experience success and responsibility for their learning tend to want to continue to learn challenging skills, which in turn, increase self-efficacy, positive attributions, and educational motivation (Baker & Graham, 1987).

Self determination theory

Self-determination theory (Deci & Ryan, 1987) states "that autonomy connotes an inner endorsement of one's actions. Students who have a purpose and feel that they have

control over some aspects of their learning are motivated to achieve success. Thus, students require a purpose, a desire and a way to attain their goals" (p.1030). The theory also postulates that the intentions of students may be self-determined or controlled, and intrinsic learners want to succeed for themselves whereas extrinsic learners want to succeed to attain a separate reward or consequence. Students who are intrinsically motivated have a strong sense of self-determination and have a perceived purpose for their learning.

Teachers need to comprehend that if students are able to make choices over activities and perceive they have control over the classroom learning they will develop a sense of ownership over their learning which will enhance their educational motivation (Wehmeyer, 1994). Research proposes that students "who find meaning and relevance in their learning are motivated to learn. Giving choice in learning activities allows students to find meaning and value in their learning" (Zuckerman, Porac, Lathin, Smith, & Deci, 1978, p.445).

There are three psychological needs that determine intrinsic and extrinsic motivation (Deci & Ryan, 1985). These needs are competence (White ,1959), self-determination or autonomy (deCharms, 1968) and relatedness or meaning. If students satisfy all three needs they are more likely to internalize and integrate self-determination behaviours and develop a more intrinsic form of motivation while attempting to master a particular task for competency.

According to Butler & Nisan (1986), mastery must take into account the information about the competency and success of tasks. This, in turn, is vital information for self-determination and mastery because without it one cannot assess mastery on any given task. Therefore, it would be expected that feedback be available throughout the task so that one may develop task motivation in general and interest in learning or intrinsic motivation in particular. Research has also shown that students' motivation, initiative, self-determination, and persistence may increase if the proper feedback, choice and control is given to the them during task completion (Cappell, 1992). There is mounting evidence that the most significant deficit of the new work force is not academics but attitude towards work itself and mastery of tasks in particular (Snegireva, 1990). Therefore, it appears that it is not so much the academic skills that are needed by students; it is the attitudes towards work, competency, responsibility and task mastery that may be lacking in students.

McCombs & Pope, (1994) proposed that students who work in a learning setting which creates an environment that fosters and sustains motivation through opportunities for growth and self-determination may increase academic risk-taking, creative and critical thinking, self-management skills, and life-long learning. Many co-op placements provide a working and learning environment that enables students to experience the sense of learning not for a grade but for task completion. Supervisors and fellow employees provide encouragement and guidance during the completion of tasks so as to ensure the students are aware of the importance of task mastery, not final marks.

At the co-op placement there is no competition or social comparison and each student is given ample opportunity to observe the task being carried out, experiment with the task under supervision, and successfully complete the task on his/her own. According to McCombs & Pope (1994) the students in co-op are being given the opportunities to grow and develop, which may foster self-motivation, risk taking, critical and creative thinking, and life-long learning.

Weiner (1990), in his adjusted theory of motivation, alluded to the fact that students need control over certain achievement situations with regard to success and failure. This statement connects self-determination and attribution theory. However, researchers (Montgomery ,1995; McCombs & Pope, 1994; Martin, 1994; Cappelli, 1992; and Deci & Ryan, 1987) proposed the connection of self-determination to the previous theories of self-efficacy, self-worth, and motivation. These researchers proposed that students who understand motivation and its implications for learning explore the impact of their motivation on classroom roles, develop strategies that enable them to find value in their competencies and performances, engage in opportunities to grow in choice and autonomy, establish self-determination, and a quest for goal orientation.

Goal theory

Roeser, Arbreton, & Anderman (1993) have proposed that goals are the "primary antecedents of motivation and students' approach to learning" (p. 1). Ames (1992) has identified two contrasting goals, mastery and ability. Roeser, Arbreton & Anderman (1993) state,

> When students adopt mastery goals they focus on understanding, problem solving, competence assessment through effort, and improvement and skills development. When students adopt ability goals, they focus more on extrinsic incentives for school work and the demonstration of their ability to others. (p. 1)

Other researchers (Seifert, 1996; Ames & Ames, 1984; Maeher, 1984; and Nicholls, 1984) support the claim that if students develop positive self-efficacy, attribution beliefs, self-worth, self-determination, then mastery goals will be adopted .

Dweck (1986) proposed that students pursue particular goals which affect their reactions to academic success and failure. Studies (Farrell & Dweck, 1985; Licht & Dweck, 1984; Diener & Dweck, 1980) suggest that students construct interpretations of learning situations and process the information that exists in a learning environment. These interpretations, constructions and processes lead students to adopt adaptive and maladaptive patterns of behaviour. Dweck (1986) hypothesized that patterns which promote the establishment, maintenance, and attainment of personally challenging and valued goals are adaptive (learning goals) and that patterns which are associated with failure to establish reasonable valued goals are maladaptive (performance goals).

Dweck (1988) has identified learning goals (mastery) and performance goals which may manifest themselves through students patterns of behaviour. Students, who strive to master new material by focusing on attaining competence, are pursuing a learning goal while students, who perform to impress others or avoid failure are pursuing a performance goal. Dweck found that both types of students may have the same intellectual ability; however, their performance may be different when given a difficult

task. Dweck and Elliott (1988) hypothesized that when individuals hold a performance goal and have low assessment of ability, they display the helpless pattern of behaviour. However, when individuals hold a learning goal (mastery) they display the mastery patterns of behaviour even when ability levels are assessed as low. The results of the study show that children who are oriented towards skill acquisitions (mastery) choose challenging tasks regardless of their expectations of ability or assessment. Children who are oriented towards evaluation (performance) adopted tasks that depended on their perceived ability and how well they performed. Students, who are mastery orientated, are so because they want to acquire information about the effectiveness of their learning (Dweck & Leggett, 1988) and for these students, learning has value and meaning.

Co-operative education may provide meaning and value for students because it ties the course objectives to the outside world of work. When students engage in learning, motivated by job experience (co-operative education) they are exposed to learning for the purposes of obtaining job skills. Emphasis is placed on skill and task training as opposed to final grades. There is a performance review component attached to co-operative education; however, it is on the overall performance of the student, not on only one aspect of the training. The students' learning is viewed as an on going process and they will be judge on their overall performance not on one task. According to Dweck & Leggett (1988), an ideal task within a learning goal is "one that maximized the growth of ability and the pride and pleasure of mastery, quite apart from how one's abilities are

showing up at any given moment" (p.261). Therefore, co-op may be a means to achieve Dweck's "ideal task within a learning goal" (p.261).

Work experience while still in school may help students engage in mastery goals that encourage persistence in the face of difficult tasks, sustain performance in the face of failure, and enhance positive beliefs regarding attributions, self-efficacy and self-worth. Students may be involved in the attainment of mastery or performance goals; however, one must consider the classroom goal structures found in the school system.

According to Ames & Ames (1984), students' motivational behaviours develop from a classroom goal structure that may be one of three different types: competitive, cooperative or individualistic. Students who define their successes by comparing their accomplishments to those of others are engaging in competitive goal structures. The competitive classroom lingers because teachers believe in the traditional competitiveness. Therefore, students work against each other to achieve the same goal. In this form of learning structure, only a small number of students will achieve that goal. Students who define success through helping themselves and others achieve their accomplishments engage in a cooperative goal structure. The cooperative classroom endures because students help each other achieve the same goal.

The final goal structure in Ames & Ames (1984) study is individualistic, which according to the theory, "advances because one's goal attainment does not increase or diminish by what others in the classroom accomplish" (p.536). Ames & Ames (1984) hypothesized that the different types of goal structures affect students' motivational

processes. The traditional classrooms in Newfoundland and Labrador promote the competitive goal structure (Ryan, 1994). Research (e.g. Bennett, 1991) has shown that achievement scores increase over time when students work co-operatively. Ames (1984) proposed "that because social comparison information is made salient, students' self-ascriptions of high versus low ability covary with success and failure" (p. 537).

In co-operative education many of the social comparisons that might be found in the classroom are seen as unimportant. The student's achievement and attainment of goals are all individualistic. Each task has been designed for the student. Students are competing against their prior accomplishments and successes and failures. It is "I can achieve this goal" as opposed to "how smart am I compared to others"? These goals and achievement guidelines are what Ames & Ames (1984) call self-reference goals. In co-op education, students are more focused on mastery of the task, and that effort and persistence in the face of failure and challenge are perceived as ways of mastering the tasks. Co-operative education focuses on how well the students' performances have changed over time. Ames's study (1981) found that grade five and six students in an individualistic goal structure regarded performance history information salient, and that both past and current performance information contributed equally to the variance in a child's self-reward.

This particular finding makes a strong link between the co-operative education program and its effects on individualistic goal structures because students engaging in co-op education focus their attentions on achieving the competency of a particular task.

Failure is internalized as a learning experience that enhances their efforts to find out why they failed, and how they can rectify this failure. The goals of co-op education are mastery oriented (Dweck, 1986) and self-reward is seen as the epitome of success. The students' learning while in a co-op placement becomes meaningful for them because they see value in the tasks they have actually chosen for their individualized learning outcomes. Research (e.g. Ames, 1991; Meece, 1991; Dweck, 1988) has shown that students' goals and the attainment of these goals vary in many ways. Teachers have to decide if the research in classroom structures is important enough to change their attitudes towards goal setting and attainment. Co-operative education is structured in such a way as to enable students to have a choice in where they work, what skills they want to learn, and how they learn these skills.

Meece (1991) found students who are goal orientated engage in meaningful learning; develop levels of interest in challenging tasks; build structures that foster autonomy and collaboration; and reinforce the intrinsic value of learning. Meece's classroom environment fosters a holistic approach to classroom learning and it may include not only task difficulty or grouping patterns but the interactions that occur within the learning structures. In a co-op placement, the students certainly interact with various personalities and the students are encouraged to learn as much as possible from these interactions, especially in how other employees learn the tasks. There is a mastery-focus in the work placement that is not found in many traditional learning classrooms. Students

are encouraged to analyze and reflect on the various learning styles in the placement and develop strategies for their own learning styles.

Meece (1991) characterized traditional classrooms as ones that foster uniform tasks, little student choice, and public social comparisons of achievement. These practices, she reported, may add to the decline of students' motivation and tendency towards performance goal orientation. However, at the co-op placements students have individual training plans which encompass the high school curriculum objectives. Students are also given choice and autonomy regarding the acquisition of tasks and are encouraged to engage in challenging tasks, thereby enabling students to focus on task completion instead of grades or marks. If theory is supported, co-op students have a better chance in developing and maintaining motivation and a goal orientation towards life-long-learning.

Goal theory is connected to the previous theories of self-efficacy, attribution, self-worth, self-determination (which form an educational motivation) through a cyclical phenomenon. According to researchers (e.g. Ames, 1991; Eccles, Lord, & Midgley, 1991; Harrackiewicz, Abrahams & Wageman, 1987; Deci & Ryan, 1987; Bandura, 1986; Dweck, 1986; Maeher, 1984) students' motivation for learning encompasses many components. When students are encouraged to develop accurate positive beliefs regarding their capabilities to perform and attribute failure not to ability but to effort, strategy and other information, then a sense of self-worth may develop. Over time, this self-worth (a sense of belongingness and value to a learning setting) may empower

students to engage in challenging tasks which, in turn, may heighten their sense of choice, control and autonomy over their learning.

While students' perceptions of their learning are changing, their quest for task completion and skill proficiency may increase allowing them to engage in mastery learning which increases motivation for life-long learning. This cyclical theory of motivation may be evident in the behaviours of students. Eccles & Madgley (1988) suggest that if all components of the motivation are not nurtured (a mismatch between students' needs and learning opportunities) then a decline in motivation may occur. What is necessary is to ensure that all five theories are used to support a motivational classroom.

In conclusion, this chapter investigated the motivational theories that are linked to co-operative education. Theories proposed that educational motivation will increase if students develop value for their education, see a purpose for studying a particular course, find a sense of control over their learning, foster interest and need to achieve a mastery goal , and reflect on the reasons for success and failure in a supportive environment. This thesis will study why co-operative education fosters relatedness, value, meaning, self-determination, attribution beliefs, self-efficacy and self-worth for secondary students. Co-operative education may be an important key in making education more relevant to the student and, in turn, it may serve to help alleviate some of the motivational problems existing in our educational system. We should strive to expand and upgrade co-operative education programs in order for our future generation to reap the cognitive and emotional benefits of life-long-learning.

The literature review has proposed that students in co-operative education develop motivation and control (Deci & Ryan, 1987) over their learning activities and evaluation. The co-op programs currently in the Province's schools attempt to bridge the gap between school and the world of work. In developing various programs the students have an opportunity to experience success in skills and tasks that will influence their future careers. If students develop positive attribution beliefs regarding success and failure, they will be intrinsically motivated to view learning as a life long commitment and a "state of being" (Seifert, 1996).

CHAPTER 3

METHODOLOGY

The data used in this study was obtained from focus groups conducted during co-operative education integration sessions. During the course of the focus groups co-op students were informed that the research wanted to establish whether co-operative education enhanced students' motivation, and if so why and how. All participants had the opportunity to voice their perceptions of co-op, school and motivation and were informed that all information was confidential in as far as possible. An overview of how the interviews would be conducted was given to all groups. During the overview, introductions were conducted in which participants were introduced to each other and the interviewer. Guidelines were set for the interviews and all participants were given the opportunity to leave if they did not want to continue.

Type of instrument

The interview questionnaire was designed to be used during the focus group sessions and comprised a series of open-ended and close questions. The study used a qualitative, critical answer format to arrive at its conclusions. During the taped focus groups, thirty questions were asked of co-operative education students. An opened ended group discussion was conducted at the beginning, while a series of direct individual questions were used to retrieve an individual answer. For example, one open question for general discussion dealt with the students' interpretations of failure in school "How do you feel if or when you fail in school?" An individual question may be needed to probe

further into the answer, such as, "If you felt like that why didn't you tell your teacher/employer?"

Description of focus group sessions

The focus group sessions included only co-operative education students. At the time of the study, each student was in a work placement and had at least six weeks at the placement. A series of questions were used in the focus groups to ascertain the emotions and thoughts of the co-op students towards school, co-op, motivation, failure, success, self-worth and self-efficacy. Denzin (1988) states "description that goes beyond the mere or bare reporting of an act (thin description), but describes and probes the intentions, motives, meanings, contexts, situations, and circumstances of action..., is theory that is building thick description " (p. 39). This form of description delves not only into the cognitive phenomenon of the participants but the emotions of these participants. In order to accomplish this dual task, the researcher must make the theories an integral part of the entire process. Each question (Appendix A) dealt with a different aspect of co-operative education, namely, motivation, meaning, value of school, self-worth, self-efficacy, student choice and control, attributional beliefs, experiences, job placements, employers and teachers. During the focus groups the researcher also used probing questions (Appendix B) to help students define the meaning of the questions and answers.

The sample

The sample consisted of all the co-op students in the Avalon East school district.

These 169 students volunteered to participate in the focus group sessions. The

participants were grade eleven (Level II) and grade twelve (Level III) students attending

school from September 1996 till June 1997.

Collection of data

The taped focus groups were started and completed between November 15th,

1996 and January 10th, 1997. Two hours was the average time spent on each focus group

session. The schools provided a room for each focus group. At the start of the collection

of data the students were told the benefits and the risks of the study. At the beginning of

each focus group the interviewer took several minutes to become acquainted with each of

the students and vice-versa.

The interviewer gave historical background on teaching techniques, relationships

with students, why the research was undertaken, and informed the groups she is a co-op

program teacher. It was during this introduction that guidelines were set for interview

techniques, such as: no one had to answer questions if they were uncomfortable, no

names of employers were to be given, no confidential information regarding placements

was to be given, and students could leave at any time. Students did not have to answer

any of the questions if they did not see any relevance.

After the historical background the students were also given time to introduce

themselves by giving general information about themselves, their co-op placement, likes

and dislikes, attitude towards participating in a focus group, the importance of research in co-operative education programs, attitude towards school, the importance of working and the various job tasks being completed in the placements.

The interviewer tried to set a relaxed atmosphere by telling a funny personal story. The investigator explained that she needed the co-op students to be completely honest in their answers, for they were the experts and it was in their answers that the study would find the evidence to explain the phenomenon. In total, the focus groups provided 910 minutes of data. Verbal permission was also given by each individual student to allow taping of the sessions. When the questions were asked any student could volunteer to answer. It was during the student's answer that a more in-depth process developed. After the first student's answer other students could add to the answer by provided an elaboration or clarification.

Organization of data

All written and verbal information gathered during the focus group sessions were numbered and documented. Each tape was assigned a record number, a detailed account of school, time, date and place of interview. All notes taken during the focus groups were also assigned the same organizational infrastructure. The tapes were then transcribed into word processing files.

Coding the raw data

After an in-depth reading of the transcriptions the researcher concentrated on certain variables of co-op. Using the sixteen variables of motivation, experience,

expectation, control, choice, self-worth, responsibility, attribution, influence, benefits, skills, meaning, goals, placement/employer, teacher/monitor and co-op program a coding procedure in Ethnograph 4 was used to analyze the data. The Word Perfect 5.1 data file was converted to fifteen ethnograph sessions. After converting the word processing data into asci! files, the raw data was then inputted into an "ethno" dBase file. Each "ethno" file was coded using the sixteen elements listed above.

A search procedure in the ethnograph program enabled the variables to be saved on a disk ready for transformation into a WordPerfect 6 file. Each session was duly transformed from raw data into a workable piece of analysis and all variables were placed into variable order. The next step was to arrange the codes into strands of data. This means taking data which had similar trends or themes was treated as one variable.

This step of data analysis enabled the researcher to see clearly the relationship between the motivational theories of attribution, self-worth, self-efficacy, self-determination, and goal, and co-operative education programs. By linking the sixteen variables used in the search code results to various motivational theories and co-op programs, the researcher was able to determine the students' perceptions of motivation and co-operative education programs.

The last step in the data analysis process was making the connections for the study. The findings will hopefully add to the research already undertaken and help other researchers develop a data base on the phenomenon under study.

CHAPTER 4

INTERPRETATION OF FINDINGS AND DISCUSSION

This chapter will interpret and discuss the data that was found throughout the study. According to Glesne & Peshkin (1992), making sense from the data collected "is a quest for the written word" (p.156). Generating, developing, organizing, and writing the findings of this study were always linked in some way to the motivational theories, the sixteen variables and the perceptions and interpretations of the participating students. Data were analyzed on the basis of the common findings surrounding the theories of self-efficacy, attribution, self-worth, self-determination, and goal, and their relationship to motivation, and co-operative education. Analysis of the data, derived from the focus group sessions and participants' replies, revealed six major themes which will be discussed in this chapter. The six major themes to be discussed are: motivation, attributions, self-efficacy, self-worth, self-determination, and goals. In addition to the major themes a number of sub-themes also emerged.

The first theme was motivation. This theme was vital to all other findings in the study. Students discussed the importance of co-op on motivation. This theme encompassed four sub-themes: school motivation , co-op motivation, change to motivation and qualities of a motivational teacher.

The theme of self-efficacy investigated the judgements students have regarding their capabilities and performance. However, it became evident this theme had five sub-themes: attribution beliefs and school, attribution beliefs and co-op, feelings attached to

failure and school, feelings attached to failure and co-op, and the differences between failure in school and failure at co-op.

Attribution theme studied the beliefs students have regarding failure and success and the causes of both. During the probing, four sub-themes were important to the study: self-efficacy and school, self-efficacy and co-op, school expectations and self-efficacy, and co-op expectations and self-efficacy.

In theme four, self-worth, student perceptions of worth became very important to the study of educational motivation and co-op. During the analysis of this theme two sub-themes emerged as important to the overall discussion: influences of school on self-worth and influences of co-op on self-worth.

The fifth theme was self-determination and the feelings of choice, control and autonomy were studied. While investigating the theme three sub-themes became vital to the understanding of the data: school and self-determination, co-op and self-determination, and co-op benefits.

The final theme, that of goal, discusses the various types of goal orientations found in schools. During the analysis three sub-themes were important to the understanding of the theme: school and goal orientation, co-op and goal orientation, and the co-op skills that influenced goal orientation.

Upon the completion of the interpretation of data, a discussion will follow that highlights the relationship between the major themes and co-op. During this discussion

links will be made between co-op, the theories of goal, self-determination, self-worth, self-efficacy, attribution, and self-efficacy, and educational motivation.

Interpretation of Data

Theme One: Motivation

The first question pertaining to motivation was "What does the term motivation mean to you?" During the twelve focus groups various definitions were forthcoming. One student stated "it's what keeps you going." Other students suggested motivation was "basically what you strive for, it's a desire, a sort of push." Many students agreed with these definitions. However, some students gave the definition of motivation as "ambitions", "reasons for doing something", "the getup and goes", "what pushes you, a need a want." Several students believed motivation meant "wanting to do something without being told". Other Level III students stated that motivation was "communication, cooperation, responsibility, initiative, determination, active, ready to go, setting goals and having meaning and interest in something." It seemed that students equate motivation as a form of wanting one must engage in to accomplish something. It was interesting to uncover that almost all students had a definition for motivation and were quite willing to adjust their definition if another one seemed better. Generally, the students reported that co-op had an influence on their motivation to work at the job. However, many reported that after co-op they were more motivated to try to achieve success in school because they saw a reason for finishing school.

School motivation

There were various reasons for students to come to school. For many of the students, motivation for school attendance was different from motivation to learn. Students believed that they were motivated to come to school for themselves. Several reasons were discussed: wanting to finish school, wanting to do well in as many courses as they could, wanting to learn as much as they could, and needing to do well in high school to go on to post-secondary institutes. In one focus group seventeen students stated that it was their parents or the socializing with other friends that actually motivated them to come to school. Twenty-six students found in-class courses boring and irrelevant. These students defined boring courses as ones that had no meaning, ones that had teachers who gave only notes, ones that were not related to their future education or occupations, and ones that did not motivate them to learn. One student replied, "Why do we have to learn about some old foolish general who lived five hundred years ago when most of the guys in my class can't even read?"

Many students reported that school was not a motivating place because so many of the teachers and subjects were boring and the "stuff we learn in school" was "as old as they (teachers) were." Students beliefs about the learning experiences at co-op and the learning experiences in school could be summarized as: " if school could be more like co-op for instance learning more interesting stuff that has some meaning for me"; "have some fun learning the boring old stuff, like history"; "have more people come in or us go out"; " if teachers did more fun activities maybe students wouldn't pip off"; " I try to stay

away from the boring classes and teachers"; " you know what, some of us might even

learn how to read, if literature class wasn't so stupid."

Many of the students replied that they did have a couple of classes that were not

"stupid" or "boring" When asked why this was, one student reported it was because of

the teacher;

> Ms. is great she is so motivated herself, she acts out the words in the
> books, she even gets us to do it, I loves her, I learned so much, its great.
> No one messes around or skips her class, she goes looking for them and
> asks them why they're not there, so you don't like to miss her class 'cause
> she tries so hard to make it good and interesting for us.

Another student replied, " I think that about seventy-five percent of level III (grade 12)

students are not really motivated to do most of the courses they are enrolled in ." One

participant stated:

> I believe the rest of the school population you know, grades 9,10 and 11
> are about 50% motivated to come to school because they are bored and
> not so sure that what their doing is important. Courses like Religion,
> World History and Math are always not what they want. Most of our
> students want to do more business and computer courses so they can learn
> important skills and relevant knowledge for a future career.

Co-op motivation

Many of the participants were interested in motivation and why we do the things

we do. Students stated that the placement/employer had a great influence on their

motivational beliefs because the placement was a "fun place to be" or the job had

"interesting tasks and assignments" and these factors helped them change their

motivational beliefs. Several students believed that they were motivated from outside

forces. Many of the interviewees stated that they were motivated to enroll in co-op for the experience and to see what it was like to work in a real job. One level III student stated:

> Most of us I'm sure wanted the four co-op credits and I suppose we
> wanted to put something on our resumes. We know that this is an external
> form of motivation but once I started work I realized that the choices we
> are given and the independence we felt helped many of us understand that
> learning for self improvement was very uplifting and a nice feeling. I
> thought it would be a great experience and it was.

Many more students reported that they chose co-op because of the hands-on responsibility they would be given, and working at a placement motivated them to learn more about their placement. When asked if this "motivation to learn" would cross over into their school work several students stated that "it depended on the course", "the teacher" and the "reasons for choosing the course in the first place". One Level III student said " No, I would not want to do a course where a teacher is boring and the course is boring, I would sooner skip classes and hang out at the student council room or the music room."

To ascertain why and how the co-operative education program influenced students' motivation, a series of questions were used to investigate this phenomenon (Appendix J). To have the students working on the same level of understanding and to allow for a greater chance of probing into the phenomenon of co-op influences, the co-op program was broken down into three elements, a) the co-op pre-employment and integration sessions (for the purposes of this study it was called co-op program), b) the

co-op teacher/monitor, and c) the co-op placement/employer. Each student was asked to explain why he/she believed co-op had influenced beliefs regarding motivation which element affected his/her motivation, and finally how the element/s influence her/his motivational beliefs.

<u>Motivation and change</u>

When asked if their motivational beliefs changed because of co-op 119 students reported that it had changed and they were more motivated to learn for themselves because they realized the importance of learning and schooling. A level III student stated: " I didn't really care about education and actually last year I didn't even want to finish school, now I want to go to university, that's how my educational motivation changed". This student indicated her beliefs about her competencies, abilities and efforts changed because of her "great interest in the co-op experiences" and the "good feelings about success and failure at the work site." Fifty students stated their motivation did not change.

One hundred and twenty-two students believed that their placement helped them understand the importance of learning. These students started co-op believing that learning was not important and that the learning starts after high school. However, while participating in a co-op placement they realized that they also needed to learn in school because they needed a high school graduation to go on to any form of higher learning. One hundred and sixty-nine students discovered that almost all entry-level jobs require high school graduation. These findings influenced many students to change their motivation for learning. Most of the students reported that their motivation to learn

changed in some way while they were at co-op, and many even reported that they were

now motivated to go on to a post-secondary school to acquire more skills that they now

know are needed for the world of work. Other students believed that their motivational

beliefs change dramatically. One student stated,

> when you are treated as an adult and with respect, in a real working adult
> world, your beliefs about yourself and your abilities change and these
> changes help build your competencies, your attitudes towards school and
> yourself, and I guess, for me, is an example of intrinsic motivation and I
> know my motivation to work changed and that helped my motivation
> towards school change also.

A Level II student stated:

> My interest in succeeding on the job became very individual. I wanted to
> succeed for myself and to show my employer that I respected her for giving
> me and other students before me an opportunity to try new tasks and
> develop new skills and I went from not being motivated to wanting to learn
> as much as I could from my supervisor because she was so great and had
> so much information about my particular career. I started thinking that I'll
> go to work and just "veg"; however, after a couple of days I enjoyed my
> work, I liked learning all about computers so I tried to learn as much as I
> could. I guess you can say my motivation changed. I also wanted to show
> some of my teachers back at school that I wasn't stupid and I can do things
> if I want to.

The students were then asked what elements of co-op (co-op program, co-op

placement, and co-op teacher) influenced their motivation to which many students replied

that it was a combination of all three elements. They stated the co-op program, co-op

teacher and the placement were influential to their motivation to learn. However, they

also reported that even though the placement gave them the experiences and skills, the co-

op teacher and co-op objectives (pre-employment and integration) were also very

important because the teacher helped them prepare for the work place and the pre-employment sessions gave them the skills to develop resumes and interview skills. These students believed that all three components had a positive influence on their motivational belief. When students were asked why co-op influenced their motivational beliefs, the answers were as varied as the placements and the students. Several of the students agreed that it was the co-op learning environment. Many of the students reported they were motivated to go to work because they were doing something they truly enjoyed. When asked if the interest in co-op influenced their motivational beliefs, three level III students answered, "yes, because you become engrossed in finishing your task or project, not so much in the actual work", "you become motivated to excel at your placement because you want to learn as much as you can before you have to leave", "if students were given the chance in school to work at something they enjoyed or had interest in they would also want to learn as much as they could."

Other students replied that their co-op placement influenced their motivational beliefs because they were given responsibilities and choices in what they could learn. They proposed their motivational level changed because "our employers believe in us", "trust me to do the work", "I attempt the hard tasks, I succeed, gain confidence and this motivates me to learn more difficult tasks and skills." Other students in this focus group believed it was because their "work had value and relevance" for them and "the co-op experience influenced their motivational beliefs."

When asked why the co-op teacher/monitor had influenced their motivational beliefs the students reported the teacher gave tasks that were meaningful and attainable. The co-op teachers seem to expect more from co-op students because "they insisted on having assignments on time", "that's what happens in the world of work," Co-op teachers asked students to discuss the important issues of the day. The students stated that their co-op teachers were like role models in that they prepared them for the world of work by modeling work behaviours and discussing the importance of a positive attitude towards work. The co-op teachers treated the students with respect and they appeared to be equals when it came to co-op. When the teachers visited the students in the work place the students believed that this was also influential for their motivational beliefs. They saw co-op teachers learning about the students' placements and the teachers' learning was reported to be genuine. This modeling to the students showed that learning for oneself was important and students reported the modeling allowed them to experience what learning for oneself looked like.

When students were asked why the co-op program itself had an influence on their motivational beliefs, many of those who replied stated the program gave them academic and psychological skills needed to succeed in the world of work. When asked what these skills might be, the students replied they were "life skills such as resume and application writing", " interview techniques, personal interest inventories, finding your strengths and weaknesses", "discovering you had certain skills already and an overall picture of what to expect from employers and the work force." The integration skills that most students

found influential were the problem solving skills, the decision making skills, the team work skills, and the linking of school subjects to the work tasks and skills.

For the students in one focus group the connecting of biology, language, mathematics, law and democracy, business or career exploratory to various tasks or skills used in the work place was the number one influence of their co-op program. When asked why, many of the students reported it gave meaning to their school subjects and relevance to particular course objectives. However these students did not see meaning in all school subjects, only the ones that were linked to the world of work or were interesting (e.g. computer, art, and music).

Other students reported that only their placement influenced their motivational beliefs. The placement gave them a purpose to learn what they could about a certain task or job and they wanted something similar for the future. The learning environment was generally described as excellent and the employer was patient, kind and caring. Many of the students reported they learned from their employers/supervisors and that influenced them to do better and learn more. A student replied "I bet most of us started off wanting to impress our employers by learning and doing well but ended up wanting to learn from our employers because they had so much experience and knowledge." The students also discovered that it was "okay to fail and make mistakes" because their employers told them "that is how you learn." Another student reported her co-op placement totally changed her motivation towards school. She reported:

It makes me more responsible, like showing up for class on time because I have to do that at work. If you have problems with work you go to your supervisor and ask for help, I was always afraid to do that in school, but now I ask for help and most of the time I get it..... It also reflects on your marks and the reason I say that is because in my case with the extra responsibility I took my studies more seriously and started to enjoy succeeding and doing better in my classes.

The fifty-nine students who reported that their placement had the most influence on their motivational beliefs generally reported that a reason for this belief was the way it allowed them to learn more about themselves and their capabilities. They also stated that they learned they could do just about anything they were given to do as long as they were taught how to do it, and that being shown how to accomplish a task made it much easier to learn than just being told how to learn one.

However, many students replied that it was the co-op teacher that had the most influence on their motivational change. The interviewer asked why they believed this, and many of the participants replied that is was the co-op teachers' "enthusiasm for the program and the students" that influenced the students' motivation. Students stated that "the co-op teacher cared about how we were doing at the placement" and " our teacher teaches skills that will help us in the future." Other co-op teachers made sure that the students were prepared for the work place. By giving them pep talks about their self-confidence and their talents many co-op teachers made sure that the students felt adequate and knew they were not alone while at the placement. Co-op teachers were willing to give of their time and guidance when students felt they needed advice. Co-op teachers always seemed pleasant and motivated themselves to do extra work for employers and students

alike. The students reported that this teacher role modeling was important to the students because they saw what it meant to be self-motivated. Other students reported that the co-op teachers had better qualities and that these qualities were different from most teachers.

Qualities of a motivational teacher

To ascertain the phenomenon of co-op influence on motivation, the interviewer decided to add another variable to the study. This variable would investigate what qualities, the co-op students believed made a good teacher, which in turn influenced their motivational beliefs. The students developed a list of ten qualities that make a good and effective teacher. The most important quality of a good/effective teacher was caring or nurturing. The students reported that through their actions and visits to the work site the teachers appeared to be caring and truly concerned for the students' learning and well being. To the students, this meant the difference between a good co-op experience and a bad co-op experience. The teachers wanted the students to do well in their jobs and so students reported that their teachers' caring motivated them to do well.

The second rated quality of a good teacher was the ability to relate the courses being taught to something meaningful and real to the students. To these students a teacher who linked school to future endeavours, such as a job, university, or life in general, was really trying to teach a student something besides material from a textbook. Students believed that the teachers who accomplished this task were self-motivated and respectful of their profession.

The third quality that students believed made a good teacher was respect for students and for other people. When teachers show genuine respect for their students they not only listen to their ideas they sometimes incorporate these ideas in class. The students reported this gave the students another reason to do well in a particular course because the respect for the teacher is returned through appropriate classroom behaviours, such as listening, wanting to learn, doing and completing assignments because the teacher had helped make the learning relevant for the student. One student replied, "my teacher drives the class to be an effective learning place and isn't drive a form of motivation?"

Enthusiasm was rated as the fourth quality of an effective teacher. Students reported that when teachers have enthusiasm for their work, it shows through their teaching and is "contagious" to the students, and they become enthusiastic towards the task or objective. However, students reported the activities had to have some meaning for them, even if the meaning was just to let the teachers know "they appreciated their efforts in helping them learn."

The fifth quality of an effective/good teacher was a personable, friendly manner. One student stated, "a good teacher is very social and actually acts like a normal person, not like some form of higher human being."

Teachers taking pride in their work was the sixth quality reported. Students reported they could tell when teachers took pride in their jobs or the courses they were teaching because they would be willing to try new teaching techniques. One student stated, "you can tell when teachers have no pride in their jobs because they always have

long faces and they never smile, no matter what. They do the same thing over and over again. They're always late or they lose your work or tests and they don't care if you can read what they write on the board, or some don't even give comments on your work, they just put big "x's" on it."

A seventh quality, that of open-mindedness, was also reported to be very important to an effective teacher. For co-op students, it meant being willing to admit that students do come to school with a whole set of beliefs and knowledge and that teachers are not always right. Students believed that if "teachers fostered the students' valuable opinions and saw meaning and value in their educational motivation then the classroom would be a motivational classroom and be as beneficial as the world of work." These students' beliefs regarding the educational motivation paradigm is not a new concept. However, students believed that in most cases the belief that students are a valued stakeholder in an effective motivational classroom is not a practiced theory in many cases.

The last three qualities of sense of humour, creativity and good communication seem to be all related to how teachers behave in a classroom. Students were of the opinion teachers needed to "practice what they preach" not "do as I say but not as I do." Many of the one hundred and sixty-nine students interviewed reported that a good teacher is a good role model in that teachers' behaviours in class must be a model for students' behaviours in class. A teacher who can laugh when it is appropriate, who can role play creativity and who can communicate effectively will motivate students to do the same.

In concluding the analysis of teacher qualities, the co-op students reportedly believed that if a teacher was a caring and nurturing teacher all the other qualities would somehow manifest themselves through the teacher's behaviour. When students were asked why co-op teachers seem to have all these qualities one student reported,

> Miss X has got to be the most dedicated teacher I know. She is always there to help, not only for co-op but all the other courses she knows about. Sometimes she even helps us with our Literature, or Socials, or even Math, even though she is not a Math teacher. All the kids in the school loves Miss X. She is so energetic and kind, sometimes students in our class calls her mom. She laughs at that. I wish I had her for all my subjects, I got in co-op so she could teach me.

Theme Two: Attribution Theory

Weiner (1984) proposed that students try to understand why an event has occurred and why they failed or passed. They may attribute the cause of failure or success to either effort, competency, ability, others, emotions, task difficulty, or luck. These causes are not necessarily the only ones students may use. Students reflect on their performance on a particular test, quiz or assignment and assign blame to themselves, others, or some other outside force. A series of questions regarding reasons for success and failure (Appendix D) were asked of students. Each student was given ample time to reflect on attribution beliefs and was also given a definition of educational attribution.

Attributions beliefs and school

One important theme regarding attribution emerged from the reasons for success and failure at school. When students were asked when their attribution beliefs about successes and failures first start, almost all of the students reported their beliefs start

during kindergarten. Students reported that their first perceptions concerning failure were usually centered around colouring in the classroom. One student reported, "students who coloured inside the lines were given nicer stickers or their pictures were placed closer to the teacher's desk."

Weiner (1985) would call this a competitive classroom in which students compared grades, marks and assignments to other students in the classroom. As early as age five students learn that there are different behaviours, emotions and perceptions associated with failures and successes. The students had various beliefs regarding their failures and successes in school ranging from luck, to ability and effort. The students believed that many elements can influence a student's attribution beliefs. Students reported they believed that mistakes were bad and that you were penalized for all the mistakes in class.

After reflecting on their beliefs regarding failure or mistakes, many of the students realized that as small children failure was how they learned to walk, to talk and to understand their small world. Many students reported they came to understand that "it was through failures that I learn on to develop the skills needed to work as a occupational therapist". One level III student stated: "In school teachers say that you failed at something but I know that's not good and then you feel like @#$%. But at work everyone else is saying, like you just basically learn like more from your mistakes, you can build on them." Another student stated that one cannot learn from mistakes in school "because you don't have time like in the period, the teacher just don't care if you learn

from your mistakes or not, by the time you try and learn you're learning new stuff

anyway." A level IV co-op student reported that "school failure is perceived as doing

badly and work failure is perceived as learning from your mistakes."

> Yea it's like Math this year, we can't remember what we're doing from last
> year and the teacher's saying things like we got five minutes to go over
> this stuff, but we don't know what we're doin' and our whole class is like
> what, we can't move on we don't know this? So that's school, and work is
> great 'cause it's so different. My supervisor teaches me how to do it even
> if I got to ask fifty times, he says I got to do it till I gets it right.

Many students believed that failure can be attributed to "themselves", because they

"didn't work hard enough", they "didn't study the material properly", they "didn't

understand the material to start with", or they "just didn't try hard enough." A small

number of students believed their failures were attributed to outside forces, such as, "bad

teachers", "boring curriculum", "no meaning or value for the quiz or test", or "it was a

hard test" and " the teacher was a hard marker."

Attribution beliefs and co-op

Many students replied that their attribution beliefs started out the same as school

but changed during the placement. Students discovered in the work place that learning

strategies, prior knowledge, prior skills, and study skills are the tools needed to learn and

achieve skill acquisition. One hundred and sixty-nine students, upon completing several

weeks of a co-op placement, changed their beliefs about failure and success and reported

that mistakes were not always bad, "you learn from them" (a level III co-op student). In

order to understand the change that occurred in co-op students' attribution beliefs an investigation of the students' work related attribution beliefs was undertaken.

Students reported that they were not given the same chances to learn from their mistakes in school as they were at the work placement," if given time and another chance in school to learn from mistakes and correct these mistakes we would achieve success" (a level III co-op student). Students perceived when success was experienced in the work place it was never believed that it was just luck. However, these same students reported when success was experienced in school it was perceived as due to luck or an easy test. One subject-based level III student replied "it (success) was the dedication of my supervisor, the new skills I learned at the placement, the chances to redo the task, learning from my many mistakes, finding new ways to do the task, not feeling guilty about failure, or understanding that I acquired new abilities by learning new material through hands-on-experiences." One student reported "intelligence was a big part of how teachers attribute school success; however, supervisors in the placement seem to believe it has a lot to do with how you develop your skills for the tasks."

An example of this was reported by a student who told of his experience with success in the placement. The level III student believed that he had low intelligence. When asked where he got this notion , he stated:

> I was told it by a number of my grade nine and ten teachers. My first year
> in high school I felt dumb, guilty, angry, bored and stupid and I didn't want
> to go to school after I spent three weeks in grade nine..., I skipped most of
> my classes, I didn't do my work or assignments. All I wanted to do was
> hang around..., I think the bad feelings got worse and I developed a bigger

hatred for high school because I was told I couldn't choose Advanced Math or Physics in grade ten because I failed my grade nine Science and Math. I wouldn't be able to do the advanced Science and Math courses. So the principal put me in basic Math and general Science..., I hated school so much I wanted to quit and I skipped classes and hung out at the corner of the school..., in grade twelve I was put in co-op because they said I was unmotivated to go to school. Many of my teachers and even my parents believed that I was just not doing anything in school , so maybe I would do something if I went to work..., I wanted to do something with computers. The co-op teacher at my school said ok and put me in a very technical, computer shop. My first success with the company was very important..., my employer had a very big contract and there was a problem with the main computer program..., one of the supervisors asked me if I had any idea what could be wrong..., I sat down at the computer for several hours and not only found the problem but fixed it and saved the company hundreds of thousands of dollars.

When asked how that made the student feel he said:

more intelligent than my grade nine teachers..., my beliefs about failure changed so much while at the placement, I asked to do more co-op programs, but they told me students can only do one co-op program while in high school..., I now believe that I am not stupid, I have good computer abilities to do what I want to do..., I think failure is important because you need to learn. However, I also believed that failure should not ruin anyone's chances at doing what they want to do, or learn in school and experiences, whether they are good or bad, must be learned from..., the choices made for me, by teachers and my parents during Level I and II cut all my chances to apply for a university this year it's so stupid..., but I'm starting a summer job with my placement and I'm coming back to do my fourth year at high school to do my level III science and mathematic courses.

Another student (level II co-op) stated:

I believed that I was stupid. I found it hard to do well, but I used to try so hard. When I went to work I realized that it wasn't me really it was how I did things. At work I learned things differently... My boss and other workers, made me feel better, I now know how to learn better because of work, I don't cram anymore, if the teacher can't help me when I ask I'm

> not afraid to ask one of my friends to help me, I even know how and what
> to study, it's great.

One level III student who believed success in school was different than success at co-op

reported:

> There are different types of successes, in school and in work. I don't know
> why but I know that sometimes I feel great when I succeed in work and
> sometimes I feel different when I succeed in school. They make you feel
> better at work, you're really doing things you want to do and that makes
> you feel better about successes. It is your success not everybody else's. At
> school when you do good, its like everyone else shares..., everyone else
> does good then its not really your own..., but in work the work place is
> your own, so I likes doing well in work but I never thinks about the
> success in school. It didn't matter to me until I started to do good in work .

The students in this focus group believed that co-op changed their beliefs

regarding failure and success. Weiner (1990) proposed that students who are given the

ways and means to develop appropriate attribution beliefs, will attack challenging tasks

without fear of failure, develop a positive attitude towards learning, and develop feelings

of pride in their successes. The students who replied that co-op changed their viewpoint

of failure reportedly perceived the change happened because of co-op.

Feelings attached to failure in school

Students reported that failure in school was degrading and left them with feelings

of inadequacies, guilt, helplessness and hopelessness. When asked how they felt when

they failed at school most of the students reported feeling "intimidated", "stupid", "bad",

"inadequate", "guilty", "little", "sick", and "poor, angry, dumb"..., "I feel less important in

class, not belonging with the rest of the students." When these students compare their

grades in a quiz or a test to their friends or fellow classmates they had feelings of pride, stupidity, quilt, and shame. For example, one student stated: "the feelings went deeper because it was your friends and peers that actually did better than you." Many students reported that there were feelings attached to success and failure in school and at work and these feelings also affected their motivation to learn at school especially new mathematics or science skills.

A student reported that "friendships broke up over comparing marks because you feel dumb, not part of the crowd, and it is really stupid to compare marks and averages because all people learn differently and we are doing different things." All of the students detailed their attribution beliefs as "a way of school life, almost a way of learning how to avoid failure." One student even reported, " that some feelings of failure are so strong that I have sickness during exams and this is a way out of writing your major tests so as to not fail". Students felt guilty when they failed at school. "I also blames meself when I fails, I tells myself I'm stupid and sometimes my teachers says can't you get that through your thick skull, so I' blames meself."

Another student that, "I know many students who have problems coming to exams remembering what they learned at the start of the year and did badly on the exam. They called-in pretending they were sick and the test will not be counted on their final grade." "There are so many ways to get out of writing exams, I bet even in university, lots of people tries to get out of exams." When asked why they believe this, a student replied, "That's a little obvious. It's bad for you. If you fail you feel stupid, so I bet any money

they finds excuses and they've had twelve years to learn so they are masters at avoiding

bad things." These replies are consistent with the learned helplessness theories, (Pintrich

& DeGroot, 1990; Harackiewuicz et.al., 1987; and Dweck, 1985) and describe the work

and failure avoidance behaviours characteristic of learned helpless students.

<u>Feelings attached to failure at co-op</u>

There are a variety of feelings that are associated with success and failure

regardless of placement. These feelings may consist of pride, blame, guilt, anger, hurt,

stupidity, shame, joy, competency, belongingness, and/or value. But students reported

that these guilt feelings (experienced at school) were not present when they failed at work.

"At work I know I can redo the task and so I don't feel bad or anything." One Level III

student stated she never experienced failure, she only learned from making mistakes. She

stated:

> I didn't experience a failure at the placement because my employer said
> that's how you learn, by making mistakes, so when I made lots of mistakes
> starting out at my job, my supervisor said that means I'm learning a lot and
> that made me feel great. I knew I could learn new things without feeling
> stupid.

A student who experienced failure at work reported, "it was not a bad feeling that I

experienced,..." "It was more like fixing up your own room." Many of the students

reported the tasks performed on the job were their own. They had feelings of ownership,

pride and loyalty. They felt that they were not only letting their supervisor down but

themselves as well when they failed. "I don't have the same feelings about failing at work,

because I know I can learn from my mistakes and I'm not stupid." A student reported "my employer told me that mistakes are good you can build a good career on them, but only if you learn from the failed task."

Differences between failure in school and co-op

Many of the students also reported that failure happened at the work place but it did not seem as drastic as failure in school. For the purpose of this study, students defined failure in school as a poor mark on a test, quiz, or assignment and failure at work as not completing the task correctly. There seemed to be different feelings attached to failure at work than failure in school. A level III student reported:

> when starting my co-op program, I was very nervous about doing something wrong in the work place..., I was afraid I wouldn't be good at anything, I would screw up something important..., I thought I was going to fail at work just like I do sometimes in school. However even when I did make a mistake, I wasn't looked upon as stupid.

One student reported that failures at work were always forgotten about; it was ended and that was it. For example,

> The supervisor always asked me if I learned something from the mistake. If the answer was yes, she would say great. If the answer was no, I had to redo the task until the mistake was recognized and then I was asked how I felt about the mistake. Most times I could learn that it was just a careless mistake or I didn't understand the instructions. My supervisor always told me to make sure I understood what I was supposed to do.

When some of the students experienced failure in the work place they did not take it personally. One student reported how he saw the differences between failure at work and failure at school.

> It's no big deal when you failed at work you just tried it again and again until you knew how to do it and you got it right. But in school you don't do that. If you get it wrong, the teacher might help you to figure out what you got wrong, but you sure don't get to do it over and over again until you gets it right, sure we'd all get hundreds on our tests. Then what would we they do.

Many of the students defined the failure at co-op "as not being a result of being stupid but other reasons, such as not knowing what was expected or not having enough training to complete the task." Students reported that if they were "given the opportunity to learn from our mistakes (failures) in school we would also learn coping skills for life". This would support the argument that students who leave school are not prepared for coping in the real world (Law, 1990). Students themselves believe that they need to be treated as effective members of society so they can contribute to society as opposed to being a burden to society. Students reported that their beliefs regarding failure changed because of the experiences at co-op. Students who believed they were incompetent at school, learned through co-op experiences that it was not their abilities that were at fault, only their approaches to study, skill attainment, and strategies for completing the task.

In conclusion, the students' responses supported the premise that appropriate attribution beliefs affect student motivation. If students attribute success to ability and competency, and failure to strategy and effort, positive emotions of self-worth and self-

esteem will develop. Students believed, after their completion of co-op, if given the opportunity to master the old task before going on to a new task (e.g. which happens in the world of work, and not at school) they would develop a positive orientation to failure. This would include focusing on new learning strategies and placing more emphasis on effort rather than competencies or abilities and focusing more attention on developing a positive attitude for learning rather than a negative attitude towards high school. The attribution beliefs of most students in this study changed over the course of the co-op program. Many of the students reported that they changed from believing that failure is bad to believing that failure is a way to learn. Many reported that school should change the terms used regarding failure. One student suggested that " schools should use mistakes instead of " failures." Students generally believed if given the opportunity to go over their mistakes, redo the tasks, and concentrate on the task at hand before going on to a new task, an appropriate attribute belief system would develop. By developing these attribution beliefs students reported they would also develop and enhance their self-efficacy.

Theme Three: Self-Efficacy Theory

The term self-efficacy refers to the beliefs students have regarding their academic performance and achievement capabilities in a course of study. Bandura (1977a) hypothesized that personal judgements regarding performance capabilities had a diverse effect on achievement settings, performance, motivation, self-worth and choice of activities. Students who maintain a low self-efficacy may avoid tasks that are seen as

challenging or difficult and students who are highly efficacious may be more willing to face difficult and challenging tasks.

In order to investigate this theme a working definition for self-efficacy was developed from the one hundred and sixty-nine participants. After careful collaboration, the following was used as a bench mark definition for the study: self-efficacy means a person's beliefs about performance capabilities for a certain subject or a certain task at the job placement. The study proposed that a person's beliefs regarding performance manifests itself in students' learning motivation and that co-op influences a student's self-efficacy. All students understood this definition and were very open to giving these judgements. A series of self-efficacy questions (see Appendix E for a complete copy of self-efficacy questions) were then asked the following is an analysis of the findings.

Self-efficacy and school

Students were asked to discuss the difference between achievement capabilities and academic performance in school and whether or not it made a difference in their motivation. On average many of the students reported there was a big difference between thinking you can do something (capabilities) and actually doing it successfully (performance). However, there were students who did not see the difference between being competent and actually performing. There were other students who believed that there was probably a difference, but it did not matter to their motivation. When asked, "How do beliefs regarding your school performance impact on your motivation in school?" Several students replied that self-efficacy (confidence was the word the students

used) did not have anything to do with their motivation to learn in school. "Believing you can do well has nothing to do with actually doing well, sometimes it has to do with the teacher." "Building confidence is really hard to do when in school because of all the negative comments made by teachers, however, I have confidence in myself, and no teacher can take that away" (a level III co-op student). "Knowing you are going to achieve is fine, and you can believe that you can succeed all you want so ya, your own beliefs is not based on teachers, however, performing successfully on a quiz or final exam still depends on how the teacher makes up the exam and grades your answers" (a level III subject-based co-op student).

Many students believed that teachers have tremendous power over the students' final marks on tests and exams but not on their capabilities. Students in one focus group stated teachers even had power over mathematics and science tests where there is only one right answer. The students believed that the wording of the question (sometimes referred to as ambiguous multiple choice questions) was in the hands of the teachers. When asked if there was any way to get around this in high school many of the students replied that you "suck-up" to the teachers. When the interviewer asked if these students considered themselves capable of doing the high school courses many of the students said "yes" they were capable of doing high school curriculum. One level II student replied; " I believe myself quite capable to do all the high school subjects like math, sciences, literature and socials."

Many students reported that the beliefs and judgements they held about their capabilities and performance in school did not matter in the scheme of a day to day routine. However, they reported that the subjects and teachers had a great deal to do with their performance outcomes. One student reported "the teacher's power over performance was cast in stone and would not be fixed until the stone is crushed." Students believed teachers have absolute power over the evaluation process and that power would not be changed until the evaluation process was changed by either curriculum changes or high school reform. Several level III language co-op students stated that "getting rid of teachers' power over student performance on tests would be accomplished through " major curriculum changes", "teachers' accountability", "teachers' performance evaluations" and a "more stream line approach to the subjects being taught in school." The students were adamant about these beliefs and for them it did not matter how high or low their self-efficacy was, the judgements about academic performances were just judgements, and that was fine. However, the outcomes of their performances still depended on teachers and curriculum.

At the end of the discussion one level III student, who believed she was very competent and was a first class honours student summed up what she thought about students' beliefs concerning capabilities and performance.

> In school I think students do believe they can do well and do the work load
> and that they will achieve good marks in the course objectives...,I don't
> think students try to fail..., they can believe they will do well in school, and
> actually try to pass with good marks ..., when you have so many boring
> subjects, like religion and language, too many assignments and stupid tests,

teachers' attitudes and different correcting techniques and test formats, sometimes students don't do so well..., I guess we are fooling ourselves. I think students like to feel smart by pretending they know more than they know..., and it's even better when you know more than you think you know. This gives confidence..., I expect to do well and I do well, but sometimes I have to ask teachers why I had this wrong or that wrong because I thought it was right..., sometimes they'll say things like it's another way to approach it, or to keep you honest, it's stupid..., you have to put your mind to it and just do the work. Believing you can do it is not enough you have to want to do it and know how to do it.

Self-efficacy and co-op

Schunk (1985) reported,

When students are given (or select) a goal, they are apt to feel motivated and they experience a sense of self-efficacy. Initial sense of self-efficacy is substantiated as they work at their task and observe their goal progress. A heightened sense of learning self-efficacy helps sustain task motivation. (p.217)

In co-op programs students choose or select their placements, their learning activities and their tasks while at a co-op placements and are able to choice and complete as many tasks as they feel they can accomplish. These students are also allowed to choose the difficulty level of the tasks. Therefore, more probing was carried out to uncover if the students' self-efficacy changed during co-op and if so, how did it change? The findings supported the premise that co-operative education affected self-efficacy and that both co-op and self-efficacy influenced students' motivation to learn.

The co-op students believed their self-efficacy was high and that their motivation strived on the belief that they would perform well at work given the opportunities to learn. This was a cyclical reaction in that they knew they had "good work habits", were

"capable to do the work" and were "willing to put effort into the job to get work skills"
and this in turn influenced their motivation to learn, which then added to their
competencies and performance. When asked if their employers' expectations had any
influence over their judgements regarding their capabilities or performances twenty-three
students stated they did not think so. The students were then asked to discuss their
performance judgements regarding their work skills and how capable they thought they
would be in a work placement. The students said they already had performance
evaluations and feedback and these evaluations ranged from above average and competent
in most skills to below average and not competent in some skills. However, students
reported that their co-op formative evaluation greatly influenced their self-efficacy.

Several students reportedly believed self-efficacy for co-op depended on the tasks
and the specific jobs given by the employers. Students replied that they thought they
would be competent to complete the tasks if they were given enough training. One level
III student replied:

> I never liked talking about my abilities or how well I think I can do; I
> thought it was conceited to do that. I realized that I was very capable and
> my employer helped me see that it is not conceited to talk about how
> capable you are or how well you can do a job..., it's only conceited if it's
> not true, I mean that you are able to complete the tasks your employer
> gives you, but some people say they can do something but they really can't.

It was discovered during the probing questions that task choice over co-op
activities also had a great influence over the students' self-efficacy. Students in one focus
group stated they had a choice in where they wanted to work. Therefore, they felt that

because they chose where they wanted to work they believed they would perform well and this focus group were confident they could do the work. But they also believed they would need guidance, extra help and more time to learn how to do their tasks and how to acquire new skills. But when asked if this came to fruition twenty-two students reported, that they did not need as much time as they thought they would to achieve success. One student replied, "for me, I learned skills easier then I thought I would, and I think this made me feel very competent on the job."

<u>Self-efficacy and school expectations</u>

The third sub-theme that emerged as important to the interpretation of students' self-efficacy was expectations. Probes were made further into expectation and its relationship to educational motivation and co-op because these expectations seemed to influence students' perceptions of self-efficacy. Therefore, a detailed analysis was undertaken to investigate the phenomenon of how expectations influenced self-efficacy, co-op and educational motivation.

All students were asked a series of school expectation questions (Appendix F), they were asked to define the term expectation and to give a detailed accounting of their expectations of teachers and school. They were also asked what they perceived to be their teachers' expectations for them as students. What follows is a summary of the participants' answers.

All participants believed expectations to be what they themselves plan to accomplish in school (i.e. what I must do to get out of school, what my teachers think I

can do). This definition seemed to be acceptable by many students interviewed and was used for all the questioning. After the definition was clarified, students where asked where and how students' expectations concerning school develop. Most of the students agreed that expectations developed during the first years of school (primary). Many of these students were able to give some detail of their initial expectations and many of the students reported they had high expectations for high school.

Most students reportedly expected high school to be" fun", "hard and easy at the same time" and other students perceived school to be" a lot of work" (consisting of more writing and mathematics courses). Still other students perceived high school to "be scary and intimidating." These students also believed that their teachers would expect ("push" was the word used) them to work hard and do their best in all their courses. When asked how students developed these expectations most reported that older siblings, junior high teachers, friends and parents started the beginnings of their expectations.

One theme that developed was the change in the students' expectations that occurred during high school. When asked if their expectations changed during high school many students agreed that their expectations changed and thirty-four students believed their expectations changed for the worst. With a more in-depth probe, several students stated that after their first year of high school they knew how to avoid working hard, how to get away with mediocre work, how to avoid study and still pass. Other students reported that their expectations changed depending on the course or the teacher. When asked by the researcher why this happened, the students said that if the course was

meaningful to them, they did their best to understand the material and get a good grade. Further, if the teacher was a good teacher (defined as one who respected them and wanted them to do their best) their expectations for the course increased.

One student replied that high school in Level III was a "piece of cake; you have to work hard to fail high school, in that you don't go to class, you do none of the work and you write none of the quizzes." Their expectations for high school lowered and they wanted to have fun in their last year. A student called Level III high school a "false environment." When asked to explain this, he told the researcher;

> level III is a veg year..., many of the needed university courses are mostly finished in level II, I only had to do a level III language course, which was required by universities and colleges. All the other courses were level three electives..., I believe that my expectations, study habits and work ethic suffered a great deal during the first semester of level III..., Because of this I won't be prepared for the world of post-secondary education or the world of work and that's why I call my high school years "a false environment.

Many participants reported having "average expectations" for high school. They discussed the importance of teachers' expectations and how important these expectations were to a student's school success or failure. They generally expected school to be hard and teachers to be caring and respectful of the students' beliefs, expectations and learning styles. However, 111 students reported that school was not as hard as they though it would be. Another 96 students thought their teachers were not as respectful or as caring as they believed they would be. These students also reported that teachers expectations did play an important role in their motivation. "If teachers' give you respect and expect

you to do well in their courses most of my friends would try to succeed." When asked if high school met their expectations most of the students responded positively, to a point, in that, "many of us adapt to course selection, subjects and teachers changes, the differences in interests and the credit system." One student stated that "expectations can change and many of us will probably adapt to change when the time comes."

When asked if high school met their expectations 87 students reported that high school turned out to be boring and meaningless. Eighty-one students stated high school exceeded their expectations because they were involved in extracurricular activities that would help them in their future endeavors, (e.g. music, band, drama and sports).

Forty-nine percent of students perceived they had high self-confidence and in turn had high expectations for school and they stated that these expectations never changed. They expected to do well in high school and did experience success. When asked if these expectations influenced their attribution beliefs towards success and failure, one reported that "it depended on the expectation itself, the teachers and the courses" (a level II subject-based co-op student). Several students stated that it depended on how high or how low the expectations were set. A very confident young man stated; "I started out with a high expectation of high school and doing well, however, I was very disappointed in high school and the overall curriculum."

Thirty-six percent of students felt they were not doing as well as they thought they would and they believed it was because of "the teachers' teaching techniques"; "the courses themselves"; "the meaningless junk we have to learn"; and "many of us don't want

to bother to do a good job in these stupid courses." These students did not appear to be motivated to excel; they were willing to "coast along" and do the bare minimum needed to finish school.

<u>Self-efficacy and co-op and expectations</u>

When students were asked what role co-op expectations play on students' self-efficacy they replied as follows. Students reported expectations of competencies for the co-op performances at the job placement were high because; " I'm sure that most of us want to learn as much as we could about the world of work while still in school and we had the choice to go where we thought we could learn..., " I bet ya, most of us are more willing to do any task or job that would help us gain our expectations for the job." Students reported that they were not sure what influenced their self-efficacy. They could not decide if it was co-op that influenced their expectations which in turn, influenced self-efficacy or if it was expectations that influenced their co-op program, which influenced their self-efficacy. What many of the students decided was " really it doesn't matter which one comes first, what matters is that for me, I know I am capable so I'll try new tasks at work, and maybe that will help me in my science."

The participants were then asked to discuss their perceptions concerning their expectations for co-op placements. During their pre-employment sessions they came to develop some workplace expectations. One expectation was called "the new employee syndrome". This, the students stated, "was orientating themselves to the expectations of their employers". Many students also reported that "the number one expectation was to

learn experience in the world of work and to gain skills." When asked if co-op met their

expectations sixty-one students reported positively and 81 % of students stated their "co-

op placement exceeded their expectations." When asked why this was so, one student

reported, " we develop skills that would not only help us plan a career, but also help us in

skills needed for our future. Like computer skills, interpersonal and communication skills,

leadership and academic skills."

One reason for a high co-op expectation was the importance of choosing a co-op

placement. Another reason was how well the co-op teachers prepared the students for

their placements during the integration sessions. Some of the participants did not know

what to expect from co-op. However, they believed that their co-op teachers built a solid

foundation of expectations for the work placement. The number one expectation of these

students was work experience and relevant job skills. When asked why this was so, the

students replied that it was the main reason for choosing co-op so they expected to learn

many valuable work related skills. During this discussion 162 students agreed that co-op

met all their expectations and 7 students replied that their placement did not meet their

expectations. The students proposed the following reasons for why co-op met their

expectations. "It got us away from school", "we had a choice to go where we thought

we could find interesting work", "it developed resumes", "co-op gave many of us the

chance to experience a new form of learning", and "we found relevance and meaning in

the tasks and activities we undertook at the placement." Forty-one of the students

believed that co-op exceeded their expectations because "many of us learned more skills

then were expected." One student, who worked at a day care center stated:

> I did not expect much from co-op I though it would be like school;
> however, soon I came to realize that it was no way like school. It was so
> much better learning new things that were important, unlike school where
> it is boring stuff. I have learned so much more than I thought I would. I
> even have done better then I thought I would. My mom thinks it's great,
> so do my teachers because they think I'm doing much better. I guess I can
> say co-op has met and exceeded my expectations.

Several students reported their co-op expectations were not all that important and so their

experiences in co-op did meet their expectations because they did learn more than they

thought they would.

A number of students reported they did not go into co-op with any high

expectations. One student Level III student stated, "after only three weeks, most of our

school's co-op students enjoyed their placements so much and learned so much about the

world of work and careers in general so they planned for their future working career."

Several of these students were placed in the health care industry, and even though there is

a decline in health care funding many reported that their employers believed the decline

will change (due to the aging population) and many more services will be needed in the

future.

The students working in health care reported their co-op employers held a strong

belief that jobs in health care and service careers were increasing. One student replied;

"I'm going to train in a program suited for the increase in health care, because my

supervisor, who's an occupational therapist, told me there will be jobs in the future."

Examples of these careers were occupational therapists, physiotherapists, home care

workers and dental assistants. Ten students reported they would be developing careers in

the business industry. They saw themselves as small business owners or CEO's of major

companies.

Students also reported that their co-op employers had an influence on their future

expectations which affected their self-efficacy. During their work at the placement

students found reasons to expect good things for the future. Supervisors informed their

co-op students that jobs in various careers are still there and that a general education

which emphasizes the willingness to always learn and train would help in finding

employment. This contrasted with ideas that these students learned in school about their

future job prospects. They reported that most teachers, and even parents, always had a

negative view about the future of high paying jobs in Newfoundland. "I'm so sick of

hearing about the doom and gloom of the future" reported one level III student. She

found that there are certain jobs in the health care profession that will be needed in the

future and that maybe high school teachers and government need to focus on the positive

aspects of employment. One student reported, " I was really surprised that the work place

was not prophesying doom and gloom for the future, instead I was giving great

encouragement for my job futures. As a matter of fact my supervisor told me his business

is in the growth mode."

To conclude the discussion of self-efficacy, students reported that expectations did play an important role in the development of self-efficacy, motivation for co-op and school. Most of the participants espoused that their perceptions' of self-efficacy for school were very different than their perceptions of co-op self-efficacy. They saw a very different structure in a regular classroom. However, they would like to see more of a co-op structure incorporated into school courses .

Theme Four: Self-Worth

During the analysis of data a major theme that emerged from the discussion of self-efficacy was the students' self-worth. This belief would certainly align itself with Covington's (1984) Self-Worth Theory. Covington (1984) proposed if students are given the opportunity to persist and trained to perform the tasks needed to develop skills, their self-worth will increase. In a traditional classroom it is believed that feelings of self-worth will dimish if students attribute failure to their inabilities (Weiner, 1990). Further to this belief, students with low self-worth express feelings of inadequacies, humiliation and guilt. This study investigated the self-worth of co-op students to find out if their self-worth changed while in a co-op placement and if this change influenced their educational motivation.

All participants were asked to define self-worth. Most of the students held the opinion that it was how much worth or value you perceive yourself to have in any given situation, or it could also be a sense of belongingness. Some statements included , " It's the way you feel about yourself". "It's getting to know yourself and how you value

yourself." "Self-confidence means believing in yourself." " Self-esteem, self-worth means how valuable you are, it means you know how important you are to everyone." " It's believing that what you do has meaning and value to you and others, like co-op." " It's valuing your self and your work and that gives you worth." Students also stated they thought "self-worth was the same as self-esteem." This definition was used throughout the study so all participants were on the same playing field. One student reported that "being given responsibility would be one way to develop and/or improve self-worth in school." Another student replied, "when I was given responsibility for three patients' therapy I was so nervous, but my supervisor told me if she didn't think I could do it she wouldn't have given me the patients."

School influence on self-worth

When participants were asked if they had any responsibilities in high school, they unequivocally reported the responsibilities they were given in school were minimal and they felt that even though they were level II and level III students (perceived as young adults), they were treated like children. One students replied "it was very difficult to return to school in the mornings after working in the afternoons because you are given as much responsibility as they can give you at work". "Being treated like a child after feeling like an adult is really confusing and trying to address this issue with my teachers is a losing battle." When the students were asked to explain what responsibilities they were willing to take on or have teachers relinquish, several students wanted homework checks abolished, being told to open your books read pages 27 to 34; being treated like

kindergarten kids was a blow to their egos. When teachers lay out what is important, by using overheads, and giving notes, they do not give the students any chance to read the chapters. Therefore, they can not decide for themselves what is important and students believe that this is their responsibility. Most students reported they needed more control over their learning, more choice and decision making for what happens in the classroom, "just like we've experienced in the work place." "These responsibilities are forced upon you in your first year of college or university and students who have no co-op experiences can't cope with these responsibilities and maybe that is why there is a high failure rate in first year college and university courses" (level III student).

One student replied that "if teachers were willing just to support the students' learning as opposed to controlling students' learning, most students would take on more responsibility for their own learning and do better I bet". Another student replied "If teachers treated us more mature, pushed us more, treated us with respect and as equals in the classroom environment, gave us more independence, then students would take more responsibilities and develop a sense of accomplishment and success." These two students believed that in turn these responsibilities would add to the competency and self-worth of the students. The student believed that "the most important qualities employers wanted in a future employee were initiative and independence." Unfortunately, many students reported that "high school does not help students develop these life qualities." They believed that these skills are "developed over long periods of time", are usually "learned through modeling", "being given the opportunities to experience independent learning"

and " being given the chances to take the initiative while learning in a secure learning environment." Unfortunately, many of the students reported that this does not take place in school, "but lucky for us we get it at co-op and I bet we will be more qualified to work and take on responsibility than students who don't do co-op or work."

Most students reported that their sense of self-worth also depended on how they were treated in class. If their teacher respected them or liked them, students believed that their feelings of self-worth increased or stayed the same, but never decreased. For example a student stated: "If I am respected more by my teachers then that's important to the development and increasing of my self-esteem."

Students understood the concept of self, but they believed that if they were not treated as an individual who needed respect and acceptance then no matter how high their self-worth is it could be lowered. Many of the students substituted self-worth with self-esteem and believed that one could not have one without the other. An analogy was made by one student, "it was the difference between identical twins, they are the same but there are differences; you can't have one without the other." When asked how students developed self-worth most students agreed it was assuming responsibilities which developed qualities that allowed for the building of worth. One student reported " I believe that when students are given the opportunity to do all kinds of these things, like study what they think is important or doing what they feel is important to school, then your sense of worth develops and grows."

Many of the students believed that their self-worth and self-esteem gradually decreased when they entered high school. Several reasons for decreased self-worth reportedly had to do with teachers' attitudes towards students. One student reported, " I was called stupid and not worth Mrs. Y's time." Several students concurred that a negative teacher attitude towards students would result in the development of low self-worth in certain students. Students proposed that poor performance and ridicule in school also added to low self-worth. Being compared to smart kids by teachers lowered students' sense of self-worth:

> I remember being compared to my older sister. She was a great student, always doing good in science and math. But I was never good in math or science. Teachers told me I would amount to nothing because I was always talkin' in class. I guess I believed what they said so I didn't do much in class or at home. I was always told my sister did better in this or that and I really hated her. My self-esteem was really low and I always believed that I couldn't do nothing. But I know now that I can. I'm good at my day care.

Students reported that low self-worth also was affected by failures in school. "When I left grade eight I was doin' really well. When I got to grade nine I was doin' bad and I didn't know why, so I thought I was stupid and couldn't do the work." This student reported that her self-worth was really low and she believed she had no worth in her class.

A large group of students agreed that doing well in school was not as important as feeling wanted in class. One student stated, "If a teacher accepted you as you are and did not compare you to others then your self-worth would increase." The students gave several suggestions to increase self-worth. Students commented that self-worth could be

increased in school by "students taking responsibility for learning", "like being allowed to redo a failed test, or studying a novel that is more up-to-date", "extracurricular activities", "volunteering in the church or community", "helping out at home with younger siblings and housework", "helping out with the guys in your class who aren't doing so good", and "setting non school, or school related goals and achieving them."

Teachers can also increase students' sense of self-worth. Many students reported that respect for students as individuals was the most important way teachers could help their students develop a high self-worth. One students reported,

> if teachers allowed students to be themselves, develop belongingness to a classroom and not compare them to other siblings, focus on them as opposed to their grades, then students may develop their self-worth. Most of us in co-op don't have to worry about self-worth 'cause we get lots of building up of our esteem and confidence at work.

Co-op influence on self-worth

The next question regarding self-worth was "Do you believe your self-worth/self esteem increased, decreased, or stayed the same while you were at your co-op placement?" While all students answered this question, 33 students reported very little change in their self-esteem/self-worth. Forty-one students replied they could not say if self-worth stayed the same or increased (however, these students did say they felt their self-worth did not decrease while in co-op), and 95 reported that co-op influenced and even increased their self-worth.

Most of the participating students believed their self-worth increased at the placement. When asked why they thought this occurred, they suggested a variety of

reasons with the most frequent answer being " teachers treated me with respect", or "as an equal." "Being able to voice opinions" and "having them taken seriously" were also frequent answers. Statements such as "gaining confidence in yourself and your abilities increases your self-worth" were offered frequently by students. Employers who gave students independence, responsibilities, choice and control in their work station was also put forward as a strong reason for an increase in self-worth/self-esteem. Other reasons, such as liking the job or the employer, arose several times throughout the focus groups.

Students frequently reported they were wanted and needed by their employers. Feelings of accomplishment and pride increased their self-worth and this attribute was needed to be a productive employee. Feelings of belongingness, having fun while learning, experiencing success and failure in a stress free environment, and learning new relevant skills were important for the development of self-worth at the placement and in school.

When asked what was the most important co-op experience that influenced self-worth one focus group reported that it was being treated as an adult or equal. This equal treatment consisted of employers and fellow employees' behaviours and attitudes towards the co-op students, and the confidence the employers/employees had in the students. The behaviours, included being respectful and understanding, being patient and nurturing, and being willing to repeat and re-teach the tasks which must be learned. Many of the participants also reported they experienced a high level of maturity in the work place, and saw the behaviours of many of the students and some of the teachers in school as

immature and inappropriate behaviour for the work place. Several students gave examples

which existed in a classroom setting. One student reported:

> Once when I didn't have my homework completed Miss X yelled and
> screamed so much at me she lost her voice. It was really embarrassing to
> me and I never experienced anything like that of that at work. I think Miss
> X was not as acting in a very professional way. I know we're bad
> sometimes but that don't mean she has to yell her head off. She calls us a
> bunch of kindergartens, maybe sometimes we act like that but that's how I
> feel sometimes.

Several of the students reported that in some level III classes students' behaviour

was sometimes very immature. When asked why these students behaved this way many of

the interviewees stated that these students may be bored or may not understand the

material, or the teacher is a boring teacher, has no control over the class, or the students

do not respect the teacher and vice-versa. "Not being motivated to learn the stuff" was

also listed as a reason for inappropriate behaviour. "When students are not motivated to

learn they act out" stated one level III student. When asked if they see the same

behaviours at work, students responded in the negative, because one student replied "what

we learned in the work place had fun built into it." "There are no strict rules about talking

on the job and what you are learning is important information needed to complete a task

or job." These students believed that the behaviour of some students and teachers in

school is definitely immature when compared to the behaviours at work. Students agreed

that the maturity level engaged in at work greatly influenced their self-worth and they saw

a change in their maturity level when they returned to classes in the mornings from being

at work in the previous afternoon. However, many said that as the morning progressed, they could see immature behaviours creeping into their classroom environment.

· Another experience that many of the participants believed influenced their self-worth/self-esteem was being left unsupervised at the placement. Many students reported that after only a small amount of time in the placement (usually an average of one week) students were left on their own to accomplish their projects or assigned tasks. The students proposed that this was probably the most influential experience for their self-worth/self-esteem. Even though the students knew that help was not too far away, feelings of pride, trust, worth, honesty and loyalty were developed. These same students reported that because of co-op they had the confidence to approach their teachers and ask them to explain new material, seek clarification from mistakes on quizzes or exams, or ask what was the relevance of certain material. One student even went so far as to ask a teacher why they were studying a particular topic and how could this topic be connected to the world in general or a career in particular.

Other students reported that the most important experience they had that influenced their self-worth was learning that each action, choice or behaviour, be it in school, home, work, or life has consequences that affect your life. When asked why this was so, one student stated:

> I forgot to lock up my files one night, and someone read what I was
> working on, three days later my supervisor came to me and asked me why
> Mr. X's information was being discussed in the staff room. I didn't want
> to appear incompetent so I said I didn't know (protecting his image of
> self). But then I heard that someone else was going to be blamed for my

> mistake. I got scared, so I told my co-op teacher. Mr. X advised me to
> talk to Miss Y and that if I wanted, Mr. X would go with me, but I wanted
> to do it myself.

The next day at work, after two hours passed, the student went into the supervisor's office and told her the story. The student reported that the supervisor did not become angry but that she was very disappointed in him, not for leaving the file out, but for not taking responsibility for his actions.

This, the student reported, was the most valuable experience he would ever have. He also reported that he now tries to take responsibility for his behaviour and understands that consequences are also a part of the responsibility of an individual. When the student finished his story all the students in this particular focus group agreed experiencing responsibility was another facet of developing self-worth. All the students agreed that responsibilities given by the employers were very important to their self-worth. When asked why this was so, they reported: "it makes us feel like adults"..., "in control of my learning"..., and "we all need to develop coping skills." One young man reported that the placement taught him responsibilities and this made him organize his studies and school work. He reported:

> the pressure and stress at school is only make believe compared to the
> pressure and stress at a job site. The responsibilities awarded to me made
> me see the importance of believing in myself and knowing that if the right
> type of learning environment exists then mastering tasks can be fun. The
> most wonderful feeling of accomplishments arise inside you. I don't
> believe that this learning environment exists in high school, students don't
> have enough responsibilities in school.

All interviewees stated they were given responsibilities they thought they would never experience. Many students reported they were unsupervised for long periods of time, left in charge of their placement, and allowed to develop their own projects. One young lady stated that her science project gave her a trip to NASA to show researchers what her little computer project could do for space travel.

The students suggested that the responsibilities they were given at the placement gave them feelings of belonging, value to the organization and worth because they were treated just like any other employee and in one instance a student reported, I was more than an employee, I was considered a builder of the company." This in turn made the student feel highly competent and motivated to do better and work harder. The students compared all these new experiences as a cyclical phenomenon, beginning with responsibilities, knowledge, competency, success, value, and self-worth; these in turn motivated the students to take on more responsibilities and challenging tasks, which increased self-worth and the cycle continued. This responsibility helped them gain more competency, feelings of value, increase feelings of self-worth, which increased the need for more responsibilities. For example, one student stated:

> When I'm given a task that I was afraid to carry out I feel really great when
> I achieve success. That success gives me confidence to do more. This
> gives me more independence and value at the placement. I believe in
> myself and my employer tells me I'm just great and my work is wonderful.
> My maturity level has increased and that lets me take on different tasks and
> I'm not afraid to do harder jobs and I think that is a great way to learn. I
> wish we could learn like that in school.

The students reported that they thrived on responsibility and that they would like to have more responsibilities at school, especially in their last two years of high school.

Many students reported that their responsibilities fostered their self-worth/self-esteem in that they "felt more capable, dependable and reliable". Other students stated that "being given extra responsibilities" (co-op placement) made them take "their school studies more seriously" and that these changes in responsibilities were "reflected in their marks." Students also reported that given responsibilities while "being young" help them "develop good work ethics and take control over the learning." Several students reported that responsibilities changed their motivation because they saw how other students behaved in regular classes and they were motivated not to behave like them.

In conclusion, students stated that their educational motivation changed because of the increased sense of self-worth experienced in the co-op placement due to the responsibilities they were given. Therefore they realized that when they started a task they could actually do it with a degree of success, and this realization was personally and educationally beneficial. One student replied " It all comes down to responsibilities." Students suggested that learning in a relaxed environment (no fear of failure), interacting in the learning paradigm (having control and choice), having people who care about them and their learning, and succeeding at challenging skills (e.g. developing a computer program) were all components for building self-worth which enhanced motivation. With respect to responsibilities, the students reported that meaning, control over learning and choice in activities were also very important to motivation.

Such beliefs are consistent with the self-determination theory of Deci & Ryan. Many of the students voiced their opinions regarding the need for choice and control over their learning, meaning and value for their learning and these elements were a part of gaining responsibility which influenced their motivation to learn. At this point of the investigation, Deci & Ryan's Self-Determination was used to investigate the co-op students' testimonies regarding control, choice, relevance and meaning of the learning experiences.

Theme Five :Self-Determination

Deci & Ryan (1987) proposed that autonomy connotes an inner endorsement of one's actions. Students who have a purpose and feel that they have control over some aspects of their learning are motivated to achieve success. Thus, students require a purpose, a desire and a way to attain their goals. A study by Deci & Ryan (1987) found that interest, meaning and enjoyment are highly correlated with students' achievements and intrinsic motivation, and that control and choice over learning are highly correlated with achievement. A series of questions related to Deci & Ryan's Self-Determination theory were asked of all participants (Appendix H and I). What follows is an analysis of students responses.

Self-determination and school

To investigate the phenomenon of autonomy for school a series of questions regarding meaning, value and relevance were asked (Appendix H and I). The first two questions concerned control and choice. It was proposed that co-op has influence on

students' educational motivation because students are given choice and control over their learning, something students are very rarely given in a tradition classroom. Students responded that in school they have very little control over what courses they have to take (e.g. mathematics, literature, religion, science), how the courses are taught, and how they are evaluated. The students believed they have control over how well they pay attention in school, what they do in their future, and how much they want to learn, study, and achieve. One student reported that "many students do not want to admit this because they would have to take the responsibilities and consequences for their actions, for example, failing, acting out in class, learning, studying." Students also reported that they had no control over exam schedules, tests, assignments, course schedules, courses they have to do, and their learning activities and experiences. Many students stated that if they had control over their learning they would do advanced computer courses, music programs, drama, art, different mathematic courses, and psychology courses. They believed that many of the courses taught in high school are just fillers, which have no value to their future and they are not receiving a well rounded education.

Most of the students believed they had control over how they act in class, how they study at home, and how they develop attitude towards school. These students also reported they had some control over their failures and successes, but they had more control over their behaviours. However, they had no control over what was being taught and how it is to be taught. In other words, they had control over themselves and their

abilities, but they did not have choice in their curriculum or learning activities and for them choice was synonymous with control.

Choice for all the students was reported to be very important because this would mean they would be taking responsibility for their learning. It would help them develop initiative, independence, a work ethic, appropriate attribution beliefs, motivation to learn, feelings of competency, worth and confidence. When asked why choice meant all of this, many students replied that if they had a choice they would choose courses that had meaning and value for them and their future career choices. Students believed that if they did not gain experience in making choices while in school, then they would never learn to make appropriate choices in the future. They also reported that if given the opportunity to make their own choices for their learning they might take responsibility for their behaviours and be willing to accept the consequences.

When students were confronted with the reality of courses that had to be taken because of graduation requirements, all the students replied that there were courses that had to be chosen and passed, but that most of their courses were not up-to-date (e.g. Newfoundland culture 1200). One student stated, "the premier of Newfoundland and Labrador in the culture text was Mr. Frank Moores; however, I've no idea who he was and this stupid Culture course needs to be thrown out or overhauled."

One student reported that if they have no control over a course of study, they should "at least be given choice over how we learn the objectives." For example, "instead of taking endless notes that have no meaning, maybe some form of hands-on learning or

guest speaker, or maybe make a movie of our teen culture, skateboarding, could be used for the class." Many students reported that their school absenteeism was due to skipping boring classes or courses. They also believed that "well over 50% of their school's population is probably bored with some part of school work", " saw no meaning for many of their courses", and "wanted to get out of school and start really learning relevant skills for life." Overall the participants in this study believed that if they were given more control over their learning choices they would develop their motivation. The students reported that the relevance, meaning and value of school might come from a "personal outlook of school", "relationships with your teachers", "your school experiences", " what would happen if you didn't pass" and "the importance you placed on school." During the interviews it became obvious that school's meaning, value and relevance needed to be investigated.

It was evident that meaning, value and relevance were also very important for students if they were to develop self-determination or became self-motivated to succeed in school. One focus group described school as having very little importance for them or their future career choices and the only meaning, relevance or value in high school was the fact they needed a high school certificate to go on to the real learning (e.g. post-secondary education or work). Another focus group reported they would have liked to go on to some form of training for a career or trade and they believed that high school was a waste of time because they learned very little that was relevant for their future goals. While some of these students did not see university in their future, a trades school or private

college would fit into their future plans very nicely. Most of the students in this focus

group had part-time jobs that they enjoyed and would continue on with these jobs with the

hopes of turning a part-time position into a full-time job. These students believed that

they really did not know if their performance in school was motivated by others or

themselves. They did say they did not learn for the sake of acquiring knowledge, and one

student even went so far as to state,

> The way I'm taught most courses, I don't learn much in school that I could
> see using in my future career. I'm going to do computers and I can't even
> get a computer course, instead I'm doing two level III language courses,
> explain to me what that got to do with computers. Why do I have to look
> at some stupid essay and explain why it's a descriptive, or expository one.
> How is that helping me develop a game. Maybe if they told me how, I
> might understand the stuff I've got to learn in school, it's not like that at
> work. Miss X tells me why I've got to do this or that, and she even tells me
> how I've to do it. That's one way co-op is different than school.

Students in a focus group saw some meaning or value in high school and most of

this value came from the courses they selected, (mostly technology education, science, art,

music and mathematics) that would help them reach their long term goals (i.e university,

great paying job, good careers). This group of participants saw specific courses as

meaningful as opposed to the whole high school learning experience. These students did

say school would have been more meaningful if it offered more problem-solving

experiences and critical thinking activities like the ones they have at co-op. This same

focus group believed that they were motivated to do well in high school so they could get

into a good college or university and that in their last years of high school they chose easy

level III electives to raise their averages. Students were, for the most part, performance goal orientated in that their choice of courses were decided based on the premise of acquiring high averages (e.g. religion is a slack course, high marks will come). The students took pride in telling the researcher that they knew they would have no problem achieving success in all their goals and that they were certainly prepared for future learning.

Students in another focus group reported that the main purpose of high school "was to prepare students for future learning." The majority of these students believed high school had its purposes or value. Some of the purposes stated by students were "school should give us choices, so we can prepare for the future, I can't see this so far in my courses", " School gives you academic skills needed to advance into post-secondary institutes, but not for work", " It's a passport to your future because you need a high school graduation to do anything in the future", " we learn our strengths and weaknesses while in high school", " we meet friends, learn sports, and have fun", " School is somewhere to go", and "high school is suppose to prepare us for university."

When another focus group was asked if high school prepared them for university, students did not think so, because they knew students who graduated high school with straight A's that failed out their first semester at university. When asked why did they think that happened the majority of the participants believed it had to do with student freedom. They suggested that in university "no one checks on your homework", "no one goes looking for your assignments", "no one cares if you fail or pass", "no one checks to

see if you're in class or not", " in other words, it's your responsibility to do all of these

things on your own." One student stated "Only a handful of teachers actually give

students the chance to develop any responsibility in school." One student stated the

reason for the failing rate of first year students at Memorial University was:

> Sometimes the courses are real easy. There's not a great deal of work
> involved in the courses so most students only do the work required and
> that gets them an A in the course. When students who got A's in high
> school reach university they're overwhelmed with work and they don't
> know how to manage the workload, their time, or their freedom.

Students in one focus group suggested it might be study habits and memorization

that had an effect on "so called bright (A's) students" failing out of university. Students

proposed that you do not need to study a great deal in high school because the courses are

relatively easy, once you know what it is you have to study. One student reported:

> You know what is important because the teachers tell you; so you
> memorize the work, take notes from the board, review the worksheets and
> study all the notes before the exam. This will guarantee you an A in any
> teacher's course. Most of the study you can do in other classes, therefore
> effective study skills are never developed so all many students know how
> to do is memorization and in university that is not how you learn at least
> that's what my sister told me.

Therefore, these students believed that high school has its perceived purposes, however,

sometimes school does not live up to the student's expectations.

In conclusion it was suggested by the students that there was little choice and

autonomy in school. Responsibility and motivation to learn in school was not really

important when students thought about doing well in high school. Finishing high school

to most students was a way to get to where they really wanted to be, in other interesting post-secondary courses or work placements. However, these same students did report that co-operative education did give them choice, responsibility, motivation and autonomy. It was obvious that high schools' meaning, relevance and value did depend on personal interests or outlooks, relationships with teachers, school experiences and the importance students place on school. The thesis, through probing questions, investigated why co-op had this positive influence on the students' self-determination.

Self-determination and co-op

Students reported that meaning, value and relevance were also very important for them if they were to be self-determined or self-motivated to succeed at work. Therefore, the variables of relevance and value were combined with the variable of meaning and an investigation was undertaken to explore the hypothesis that co-op education influences students' motivation and determination because they find meaning, relevance and value in what they learn.

Most students reported there was a significant difference between the structure (choice and autonomy) of a regular classroom and the co-op placement and the learning experiences were different at work than they were in school. Students maintained they were pleasantly surprised when they started their co-op program. From the very beginning they felt they had complete control over their choices in their co-op learning experiences. From the first day of co-op they were asked to make decisions regarding the type of work they wanted to do, the type of placement they wanted to work in and how

they would learn the skills they expected to learn while at the co-op placement. Even during the in-class component of co-op they had choices to make and control over what they thought they needed to learn before they went to their co-op placement. All the students reported that having control and choice over the activities they engage in during work gave them a sense of value, importance and skill attainment which were all very important to the determination of these students. It was the choice of activities that allowed students to develop a series of skills that would benefit their life-long learning.

All the participants reported they could decide where they wanted to work; they were not guaranteed to be given the placement but they could apply. If students did not acquire their first choice they had a second and third choice. While many students, who did not get their first choice, did get their second or third choice, other students were placed in positions they did not want. Several of these students did not have a good experience and asked to be placed somewhere else. The other students said they enjoyed their placement, if not the particular job at least the transferable skills they were learning (e.g., coping skills, interpersonal skills, work ethic). A number of students reportedly decided they did not want to do a particular job for the rest of their lives so they chose to do better in school and train for a career in other field.

This indicates that choosing a particular placement is extremely important to the success of the co-op experience. Knowing that one is able to transfer to another placement (after an adequate amount of time, usually three weeks) if the co-op experience is not meaningful, is also important to the success of co-op. Again the students reported

that they had choice and control of what they learned, where they learned and how they

learned.

The focus groups were asked if they really had choice over their learning activities

while at the placement. When a level III student was asked if he had choice in his co-op

program, he reported, "yes I believed I had a great deal of choice. I chose my placement

because the job was something I always wanted to do." When asked if the choices he had

made at work influenced his motivation to learn he replied "yes, it did, I'm motivated to

do well in co-op and go back to finish school and start my future training." Eighty-three

percent of the participants reported having situations where they were given control over

their learning and were given optional tasks and assignments to complete at home or at

work. These students reported that most of the tasks and skills they learned were chosen

because they had some value to a particular job or they had relevance for future

occupations and careers.

Eight percent of students reported that during the co-op placement they decided

that the job was not something they would want to do for the rest of their lives. For

example, one student (day-care placement) reported the following,

> I always thought I would make a great primary teacher because I love to
> take care of kids. Sir placed me in @#$% day care. It was great for the
> first three weeks than I found that the crying and not listening of the kids
> just drove me nuts. I couldn't stand it, so I asked sir to put me somewhere
> else. He had a hard time but in found a place in an office helping them
> prepare for tax time. I loved it. The computer, the numbers, the laws
> about taxes. I just might do business at Mun. Imagine if I had gone to
> school and spent thousands of dollars to be a teacher and find out I hated
> it. I'm glad I did co-op. I wish we could all do it.

The students who made the decision went into the placement thinking this job is what they would prepare for after high school. However, after several weeks on the job they decided it was not an option for them. They also stated that finding this out while in high school was probably the most important experience they could have had, because it saved them from spending time and money training for a job they would eventually not enjoy.

All students reported they had control during the thirty hours of in-school integration. During these two-hour long weekly meetings, the students discussed topics of their choice. For example, students led classroom discussions regarding their experience at the work place, how they linked specific school subjects to specific job tasks and how they integrated their learning with meaningful and valuable choices they had made. During the integration session the students compared learning at work to learning in school and when asked how the two compared the students had this to say, "night and day", "black and white" "fortunate I done it, not so fortunate now I've got to go back to school in five weeks", " co-op's a meaningful experience, school's not so meaningful", " my co-op placement was very enjoyable, school's okay but I'm sure it's not going to be as enjoyable as co-op was." One student (working in broadcasting) said " school was knowing the stars are there but not being able to see or touch them, and work is seeing the stars and actually touching them." Another student compared school to "a day at the beach looking at a bridge and work is a day building that bridge."

The sub theme of co-op and self-determination also involved the importance of relevance and meaning for the tasks and activities engaged in while at the work placement. Many students learned that their motivation changed because there was meaning and value in the tasks and activities they performed. Fifty-five students who saw no meaning/value in high school reported that even though school had no meaning for them co-op was the best course they ever did.

One fact that kept occurring was the interesting activities that co-op generated. "Co-op is interesting, it helps plan for the future, it teaches skills needed for work, it gives school meaning…, I come to school only so I can go to co-op." "Co-op teaches students about the future and you learn more interesting skills in co-op than you learn in school." One student said that co-op is the only subject in school that she actually learned from because all the other course are:

> Fake, like calculus, that's not going to get me a job, I have no interest in
> this subject, but I have to take it and I am not doing real good in it either.
> But I stayed in it 'cause there's no other course at that time slot. But when
> I go to co-op I learn all about how to take care of seniors. That's what I
> want to do when I finish school. I want to take care of the elderly. My
> supervisor is giving me a part time job when I finish school, then if I need
> to get any certificates I'll get them when I saves some money.

Ninety-two percent of students reported that co-op had so much meaning for their future plans that they knew what it was they were going to do after they finished school. Most of these students knew they had to finish high school, but they did not have to get great marks. Eleven students stated that they would have to go back to high school for a

fourth year, but this would be part time and they could work in the mornings or afternoons and go to school whenever. Three students reported co-op education as "The most meaningful part of my education because it was the most real course", "Co-op was the most interesting course so far in school" and "The co-op activities and skills I did while at my placement will benefit me for the rest of my life." When asked why they believed this they replied it was because it was "hands on learning" and they learn more "from doing than you do from hearing, seeing and taking notes."

Co-op had meaning for them because it taught certain relevant skills. The first skill, communication, gave them the ability to express themselves and their opinions. Many students believed they learned new communication skills every day at their placements. The students reported they were not bored with the acquisition of new skills and they had a real chance to develop relevant skills for jobs they would like to do in the future. Many participants believed that co-op should be mandatory for all level III students and if not a thirteen week course then at least a three week option to allow students to learn resume writing, interview skills, and to experience the world of work.

Students found co-op informative, valuable and meaningful because they had a chance to "learn meaningful skills in the real world." The students stated that in co-op they learned, "how to develop computer programs", " how to design buildings", " how to apply the laws, "how important bed side manner is to a doctor, and "how to apply science and mathematics in a research setting." These students worked with doctors, lawyers, judges, architects and scientists and one student reported experiencing "a meaningful,

worthwhile, motivated learning experience." The reasons given by the students who

found meaning and value in co-op skills were summed up by two students. One young

man was working in a seniors' home with an occupational therapist. He replied:

> I was asked to shave an elderly man one day. While completing this task,
> the man started talking about all his friends that died during World War I.
> I was a little nervous and tried to calm the man down. Then the elderly
> man started to call me Charlie. I tried to carry-on a conversation with the
> man about the war. I remembered some of the causes and battles from my
> world history course. After some time the man calmed down and told me
> that he would see me in France. I realized that sometimes school work just
> might be important in real life, at least it helped me carry on a conversation
> with the patient of the nursing home.

The student returned to school for the integration class the following day. When

the teacher asked him what he had learned about work that was important to school the

student stated, "I learned that even though we may think some subjects are boring or

meaningless to us, I learned yesterday that sometimes you may remember some of that

meaningless stuff and be able to calm a person down who actually lived through that

period of history." He went on to say "it is through work (co-op experience) that students

are able to link the theory of courses to the skills of work and that in itself, makes school

subjects and school itself more meaningful and valuable, to me at least."

One student stated that she found acquiring co-op skills meaningful because it gave

her job satisfaction. She stated,

> I feel motivated to learn all I can about my work. I learned what it was to
> be motivated everyday to do something you like, and I think that's the key.
> When you like something you're going to br motivated to do it. The thing
> is to like it enough so when you've got to do boring stuff at work it's
> worth it because you still have a job you like to do. Although I'm

considered a very bright student by those who know me, like Sir or Miss
Y, I was not motivated to come to school or do my work. When I applied
for co-op, I was not accepted because I had a high rate of absenteeism.
But I was made signed a contract with the co-op teacher to come to school
everyday and co-op work everyday. I really wanted to work with small
children, maybe be a social worker or a child psychologist so my teacher
placed me in a placement where I would experience the worst of society
and its tragedies. After ten weeks, I realized how lucky I am, and how I'm
wasting my abilities and intelligence by not going to school and learning. I
also came to realize that my life was really great and I had two loving
parents. During co-op I made a promise to myself to return to school with
a new attitude in semester II and to use all my talents and gifts to help
other people. It was during co-op that I learned about the importance of
love, understanding, loyalty, reliability, dedication, compassion and caring.
School would never have been able to teach me these things but I now
know that I could use these attributes to do better in school. I believe that
students need to experience some form of co-op so they can come to
understand the importance of learning all you can when you can.

Most of the participants reported that the meaning, relevance and value

experienced at co-op was an important part of working in the real world. The relevance

of the tasks to the work placement helped them link the world of work to the world of

school. The transition from school to work was perceived to be very hard and these

students believed that once you bridged that gap school takes on a whole new meaning.

These students reported that students learn because they want to learn something new and

then it takes on meaning because they discover that they can actually complete the task

without too much difficulty. Most of these students reported they found meaning in co-op

because it helped them figure out what it was they want to do with the rest of their lives.

Co-op gave them meaning because the experience gave them the information and

knowledge needed to set long term goals and plans.

Students reported that co-op had meaning because it gave them responsibilities, hands-on-experiences, knowledge of limits and boundaries, and the experience of learning in ways that were completely new and different. One student reported that co-op had meaning for him because he learned, through experience, why chemistry, biology and physics are so important. While he was working in a scientific lab, he discovered that he really enjoyed searching for reasons why things happen. This was a level II student who decided during his placement that he would take as many science courses as he could in his level III year. When asked if he thought that would be too difficult for him he replied, "no it would not because I now know how to study, what to study and why hands-on-experience in the work place is important to the study of the science courses. The sciences took on a whole new meaning for me". One student's comment was, "what I'm experiencing in co-op was not only fun it was also important, in that I started to make connections between school and work and I think this helped me find some meaning in school". Another student reported "linking school to work motivated me to try harder to get good grades in school so I could do what I wanted to do in the future."

Seven students did not find any meaning in their co-op work. They found it boring and mundane. These students were in placements where they did not want to be. They did not chose these placements and had to be placed in these particular learning environments because these were the only ones available. The placement consisted of a garage, a drug store, an office, a day care, a non profit organization, and a school. When asked if they wanted to change their placement they all reported that they "didn't even ask

to change." These students did report they thought co-op would be a "Mickey Mouse course" (e.g., it would be a very easy way to collect four credits). However they discovered that co-op consisted of a tremendous amount of extra work. When asked if co-op was worth all this extra work, four of the seven said "no, it was not worth the extra work and stress" and three students said "yes, co-op was worth the extra work because it got them out of the school for four afternoons a week."

Sixty-five percent of students believed that co-op changed their understanding of school's meaning for their future. One student, when asked why this change occurred replied, "I never saw the need for many of the high school courses I took. But because of co-op I know why some of the courses are important, like, mathematics and language but I don't know why I have to take world history, religion, culture or economics. I would like to do some psychology courses instead of religion."

In concluding this focus group session the students who stated their learning beliefs and motivation changed because of co-op, were asked why the co-op program influenced them to learn on the job and transfer this motivation to learn in school. Many students reported that co-op had meaning for them because it helped them get a part-time job. These students were hired at their placement on the weekends and they thought they may work at their co-op placement during the summer. The other students believed that their co-op experience looked really good on their resumes and they were hired for part-time jobs. Many of the students never worked before and they were finding meaning in their co-op placements because they reported learning about the world of work gave them

an understanding of what is needed to succeed at a job. If Deci and Ryan's self-determination is applied to co-op then the students would be self-determined in co-op because they have control and choice over their learning, would find meaning and value in this learning, and that, in turn, would give them ample reason to change their beliefs regarding motivation and learning.

All students stated it was either the co-op placement/employer, the co-op teacher and/or the co-op program that changed their beliefs regarding motivation and learning. Ninety-five percent suggested they had control over their choices and they found meaning for school while at the work place while 5 % reported that co-op was not important to them now or in the future. The participants believed that it was the meaning and relevance of what they were learning more so than the control or choices they were given that influenced their motivation. Generally, students reported their co-op placement was a very valuable worthwhile experience that allowed them to explore a whole new world of learning. After this discussion regarding meaning, value and relevance that are proposed by Deci & Ryan to be elements of self-determination theory, it became evident that students saw many benefits of co-op. The following is a synopsis of their responses.

Co-op benefits

All of the participants were asked to give at least two benefits of their co-op program they felt were important to their autonomy and educational motivation. Hands-on experience and relevant skills were cited as the number one benefit, each scoring one hundred and thirty-four responses. Many of the students agreed that the experiences

gained and the skills learned while working would be the most beneficial aspect of the co-op programs.

Second, co-op students gained self-confidence. One hundred and forty students scored self-confidence as their second choice and many reported that their self-confidence levels may have been high when they started, but it was even higher during their co-op placements. Others reported that they had a low level of confidence when they started work, but that their confidence had increased to a higher level after a period of time at their placement.

Finding meaning in their jobs and tasks was the third important benefit of co-op reported for ninety-seven of the students. These students also believed that this meaning gave them the push they needed to finish high school and set goals for their future. One hundred and fifteen students agreed that the fourth important benefit was learning independence, responsibility and reliability. The students believed these three attributes were very important in the world of work and all students would benefit from learning these qualities. The fifth benefit reported by one hundred and thirty-four students was meeting new challenges and accomplishing new tasks. The students concluded that this benefit greatly affected their self-esteem and self-worth and they were not afraid to try new tasks or learn new skills.

Other benefits that students discussed as being important were immediate gratification in their successes, more motivation to work, and learning in a relaxed environment. Gaining connections and references for the future were also seen as benefits

of co-op that influenced educational motivation. Linking school subjects to relevant work

tasks, time-off school, and receiving four credits for co-op were also benefits of co-op.

For several of the students the most important benefits of the co-op placement were being

treated as equals and realizing what you do not want to do when you finished school.

In concluding the benefit variable's analysis, it is interesting to note that all

students did report at least one benefit from co-op. Seventy-four percent of the students

replied that the experiences gained while participating in a co-op program would greatly

influence their future lives, careers and this influence would enhance their self-

determination and motivation for future learning experiences. The students believed that

co-op did have an positive influence on their self-determination, in that they perceived that

the behaviours at the placement encouraged them to learn new skills, transfer what they

learned at the placement back to the regular classroom, and try to achieve success in

school so they may go on to further learning. The students also believed that co-op

enabled them to make decisions, choose appropriate behaviours, control their learning,

and continue to learn so as to gain as much knowledge as they could while at work. This

continuation of knowledge would support Dweck's (1986) theory that students that are

mastery learners will acquire skills and knowledge for competency and growth.

Theme Six: Goal Theory

Dweck (1986) proposed that students pursue particular goals which affect their

reactions to academic success and failure. These goals are divided into two basic types:

learning goals (mastery) and performance goals. Dweck defines a learning goal as one in

which students strive to master new material by focusing on attaining competency; a performance goal is pursued when students perform to impress others or avoid failure. A number of questions pertaining to goal orientation were asked of all the individuals participating in the study (Appendix G). An ideal task to help achieve a goal is "one that maximized the growth of ability and the pride and pleasure of mastery, quite apart from how one's abilities are showing up at any given time"(Dweck, 1998, p. 261).

School and goal orientation

When asked if students believed they acquired knowledge for themselves or for the purposes of looking smart for teachers, peers or parents, many of these students suggested that it was a mixture of both. Some of the students said they liked to be seen as bright by their teachers and their parents, but not their peers. Some said they felt great when their peers, teachers, and parents saw them as successful, and others said they did not care one way or the other. Many of the students replied they liked learning and they enjoyed doing well in new tasks, however they did not try to succeed for others, such as peers, teachers or parents. Rather, they tried to succeed for themselves and the pride they felt when they accomplished a task (e.g., an A paper, or a good mathematics mark). One focus group was asked how they would do in future goals they replied, "okay", "it mostly depends on why I set the goals in the first place", "do the school goals have meaning for our futures." These students believed they would succeed in their future endeavours. Seven students were not sure because they did not know what they wanted to do with the rest of their lives, and the last answer was interesting in that one student replied, " it depended on so

many other things, like not getting into trouble" which referred to not getting pregnant, not getting caught doing drugs or drinking, not getting sick. Another student replied, "I'll do okay by doing well in June exams and learning to believe in myself and my abilities."

The number one goal of the students was to finish high school and get on with the rest of their lives. When asked if traditional high school activities prepared them for life many of the participants said no. A comment most students seem to express about school goals was the fact that high school only prepares students for another form of schooling such as university, technical college or private post-secondary institute and there was no chance to set goals or prepare for the world of work. Students defined the above as a long term goal. A short term goal became more apparent when students discussed various goals. Examples of short term goals include "getting through a course", "passing in an particular assignment", "passing a math or lit test", and "getting through each semester or a school year, till your finished with the place." All level III students (153) believed that finishing high school was the most important goal where as the 16 level II students reported that finishing the first term was the most important goal in their school life at this moment.

The students were then asked to name a few of their short term school goals and discuss why they would pursue these goals. Most of the short term goals had to do with specific courses and how the students achieved success in these courses. When asked if they engage in activities or tasks in these courses for the sake of learning to develop their competencies or abilities most students said no. They were doing the tasks and activities

"to get through the course and go on to the next level." One example was a student in World History, who was supposed to graduate in June of 1997. But in October of 1996, it was discovered that he did not have a world study, a requirement for high school graduation.

"I was placed in a level II World History program. I had a short term goal for this history class. My main goal for the course is to please the teacher, get the projects done, pass the midterm and the final and receive my world study credit." When asked if he wanted to pursue a mastery goal for world history that would develop competence in the knowledge of Ancient Worlds, he laughed and said; "I don't care what happened in Ancient Greece, Rome or Egypt. I'm more concerned with getting out of school and developing a past history for myself." The student was also asked if he ever pursued a goal for the sake of learning a new task. He said, "not in school, I don't think, maybe, but I'm sure that if I had to, I suppose I would learn for learning's sake." With more probing it was found that he did not believe that the learning in high school had any meaning or relevance for his future plans; it was only a means to an end.

Generally, the participants believed that the goals set by others (e.g., boards, department of education, principals, schools) in school usually had no relevance to what they would pursue after school. One student stated " it's more important to just get high school finished and get on with the rest of our lives". Students did state they believed learning for themselves happened after high school. One student replied "I'm sure most of us will learn tasks and skills based I suppose on need or if they're relevant to our future

careers and future lives." " I don't know really, about all high school I can only speak for me and what I think, but it makes sense though."

Thirty-four students (20%) believed they engaged in mastery goals while in school. These participants were of the mind that high school laid the foundation for higher learning (e.g. university or college). They held the belief that all knowledge taught in school was relevant and necessary to develop a career or future educational plans. These students saw "all learning as important", and "were not", they believed, "engaged in the pursuit of competency for others, such as peers, teachers, or parents." It is interesting to note, however, that all of these students had long range careers planned. These students saw a university degree as a must for the future and all were prepared to go on to a masters program and/or a doctorate level. Many of these students were engaged in a science or other subject-based co-op program.

This is not to say that the previous students did not have ambitions to go on to higher level learning. They just did not see the need to worry about setting or achieving mastery goal pursuits in high school. However, when asked about the goals of the co-op placements the one hundred and sixty-nine students had different ideas of their work goals and how important these goals were. Many students reported that they could see a difference in their approach to learning at school as opposed to learning at co-op. Students replied they learned how to be competent at work, and how to pass a test in school.

<u>Co-op and goal orientation</u>

Students' goal orientation in co-op education focused the individuals towards increasing abilities that set in motion cognitive and affective processes which promoted a strong sense of intrinsic rewards for meeting challenges with effort. Students attested that engaging in learning experiences at work, while still in high school, encouraged them to engage in tasks and activities that enabled the pursuit of learning for learning's sake (mastery goal). According to Dweck (1988) goals that foster persistence in the face of difficult tasks, sustain performances in the face of failure, and enhance positive educational motivation beliefs are mastery goals. When asked if learning (mastery) goals or performance (learning to impress others) goals were engaged in while at the co-op placement, 91 % of students reported that most of the goals would be defined as Learning "mastery" goals because they were engaged in tasks and activities for the sake of learning new skills and developing competencies, and not for performing for others (e.g., teachers, other students). Although the students did want to do well while in the placement and did not want to let down their co-op teachers or employers, they were more interested in learning all they could about the work carried out in their particular placements.

Students stated that job experiences, future connections, skills, attitudes, attributes, friendships, and self-confidence were meaningful, relevant and valuable to their future life successes and careers. All of these variables helped students to see the importance of learning goals and how these goals influenced motivation. Students reported their maturity (attitude towards the importance of working hard to gain skills)

while in school was not as high as it could be, however while in the work place their

maturity increased and they started to act like mature adults as opposed to immature

students because at work they were treated as adults and with respect. They reported that

all of these behaviours were seen by the other students in the classroom and it was a direct

link with learning for the sake of learning.

Students in one focus group reported the confidence they acquired could be

transferable not only to the rest of their high school life but to their future learning

experiences. They also reported that the certain employability skills were the reason for

learning as much as they could while still in the work placement. All the students were

placed for one school semester, or thirteen to fourteen weeks. Most students experienced

two hundred hours of work at a placement and each student had various tasks, skills and

individual projects to master. One level III subject based co-op student stated, "the

successful achievement of skills and tasks was due to wanting to be competent at the work

place". The student elaborated "I wanted to learn as much as I could from the masters of

industry because that is where many of us will eventually work."

To these students, this was the epitome of pursuing mastery goals. When asked

why they held this belief they reported it was because "the tasks and activities engaged in

while achieving the co-op goals (learning and experiencing as many skills as they can)

were relevant and had meaning and value for their future." At this point in the study it

was decided that an investigation into the emerging theme of co-op skills would add to the

study's findings. The researcher added another variable into the construct, namely skills,

to provide further insight as to why students' goals changed while participating in a co-op placement.

Students stated that it was the acquisition of many skills while working at their placement that enabled them to pursue an orientation of learning/ mastery goals. An investigation into what skills were beneficial to students' goal orientations and why they believed these skills were not learned in a high school setting was undertaken.

Co-op skills influenced goal orientation

When asked to decide the most important skill they learned at the placement, most of the students believed it was the gaining and /or building of self-confidence (for the 169 participants self-confidence was perceived as a skill you could acquire if given the proper encouragement). When asked to elaborate on this answer they reported that if you did not start out with self-confidence (their idea of a skill), the work placement helped to develop confidence through successes at challenging tasks. However, if you had a strong self-confidence the placement experiences built on this already acquired skill. No one reported that their self-confidence was lowered due to a co-op experience, but many reported that their skill of self-confidence increased and was even developed while experiencing a co-op placement. A student reported that the most important skill she learned while in the work place was the realization that she "could do my particular task(job) just as well as the person working next to me." This realization, she believed, was the start of her self-confidence skill.

The second most important skill students felt they learned at the placement was interpersonal (defined as the ability to interact with customers, employees, and supervisors). The students voiced their opinions on the importance of this particular skill because it was not one they associated with high school. It reportedly took being treated as an adult, by their fellow employees and or supervisors, for the students to believe they had interpersonal skills. They proposed that being able to talk and relate to other adults was a very important skill to acquire. They did not believe that communicating with their peers, parents or teachers was the same as communicating with employers and other employees. To these students this form of communication was, they believed, a true test of an interpersonal skill. This skill, for the students, was a very valuable and worthwhile skill to have mastered or attained competence in, because it is needed not only for a career but for life; it was considered a life skill. They also added that it should be taught in school by teachers and students modeling the skill.

When a student is shy it is very hard to achieve any form of personal relationships, especially with adults. One young man reported that he was very shy all his life, so much so that during the first four weeks of co-op he never talked to anyone other than his supervisor. He stated that in his last six weeks of work he started to feel like an adult, like an equal; the other staff members sought him out for his opinions on various tasks. This treatment helped him open up to people and he became a regular "chatterbox". Many of the students agreed that once a person has gained self-confidence (first important skill)

and interpersonal skills (second important skill) he/she is well on the way for any other skill or learning experience that is important for life in general and work in particular.

The third important skill that emerged from the data was the skill of coping with stress. Again students generally believed this skill was not taught in school and that it was required in all walks of life. Seventy-four percent of students proposed that to teach this skill, all levels of schooling needed to focus on helping students cope with failure. This, in itself, would alleviate the negative feelings associated with failure. Students also went so far as to offer ways teachers could help students cope with stress of failure. For example, they said that working together co-operatively in small groups, would allow students time to go over the mistakes they made and to correct their false beliefs about the failure. Students also suggested that more emphasis needed to be placed on what students had correct and to start from that point in the coping process. The students reported being able to deal with the stresses of a job did help with the stresses of school and home life and this skill was also considered a very transferable skill which was needed to succeed in a career or in life.

The fourth important skill, communication skills and positive attitude were equally important. The students reported these two skills were equally relevant to the students' futures (students did hold the belief that a positive attitude was a skill you could acquire). Students believed that communication skills and positive attitude, once they were acquired, helped students achieve their co-op goals and successes in their learning experiences.

When the students were asked to define a positive attitude they stated that workers needed to always have a positive attitude; that in order to succeed at a job, a task or even a goal. A positive attitude consisted of a willing to laugh at mistakes but at the same time learning from them, helping others when the need was there, accepting help when it is offered, respecting yourself and others, completing your tasks when they are not that great or exciting, meeting challenges with a positive outlook (I can do it as opposed to I can't), and changing your techniques in an appropriate manner when it is required of you to do so.

Many students reported that co-op teachers, employers and fellow employees acted as positive role models because these adults were motivated themselves. This modeling allowed the students to see what self-motivation looked like and what behaviours were needed to develop self-motivation. When asked what a positive attitude would look like in an individual most of the students described either their supervisor, a fellow employer, or their co-op teacher/monitor. To these students a positive attitude could be modeled and could be learned and that meant it was a skill. When asked why the skills learned at the placement were more important than the skills learned at school, an overwhelming number of students agreed that "the skills are used everyday in the world of work"; "the skills we learn in school are subject specific, school related, and have no meaning in our future careers and lives."

However, when asked if the skills they learned at work have relevance to school, students agreed that "yes" they could use the skills from work in school. When asked if

they thought communications skills, co-operation skills, self-confidence and interpersonal skills were important to school they said not as important as they are to work, but that the skills could make their school lives easier. They also made reference to the point that they may have used the same skills at school, they just did not know they were skills. When asked why they held this belief, one of the students said "it was because I' having fun using the skills at work", and "having fun while using the skills in school never seems to happen."

In concluding the investigation of goal theory, the researcher asked one more question regarding skills: "if knowledge and experience are the two common goals of co-op then why is the acquisition of skills so important to reaching the goals of co-op"? Knowledge and experience were considered the most important goals of co-op. However, students stated that their ways of acquiring this knowledge were challenged at the work placement. Taking notes, reading, having someone tell them what to learn was not how, they believed. Most students reported that being shown several times how a task was performed then trying this task without the stress of failure was the most effective way to learn a new skill. All the tasks that made up a particular skill were broken down in sections, and as each task was mastered the student moved on to a new task. When all the tasks were completed they had acquired a new skill, be it operating a simple office phone, or operating a million dollar communications system and this was perceived as constructive ways to acquire new skills. It was through the acquisition of skills that a belief for the importance of knowledge and experience was developed and that this

experience and knowledge internalized into a belief that there was such a thing as life long

learning.

Discussion

This study undertook the investigation of a particular educational phenomenon with three main constructs, namely co-operative education, educational motivation and motivational theories . These constructs were investigated to determine if a relationship exists between the three. Twelve focus groups were conducted to gather information necessary to determine if there was a relationship between these three constructs, what type of relationship developed, how the learning experiences at co-op differed from the learning experiences in school, why the co-op learning experiences were different than school, and how the relationships manifested themselves. Upon completion of the investigations' analysis, it became quite evident that there was a relationship between the three constructs. What follows is a discussion on how the findings of co-op and motivation support the motivational theories of goal, self-efficacy, self-worth, attribution and self-determination.

Goal theory

Recent research, (Meece, 1991) has shown that goal theory has emerged as the predominant explanation of students' motivation and behaviour. Students pursue two types of goals. Dweck (1985) argues that students engage in performance goals (wanting to gain other people's good judgements about their performance) and mastery goals (wanting only to learn to gain competence).

Co-op influenced goals

While co-op students performed in the work place they started wanting to do well for their co-op teachers and employers. However, during the interviews students reported that they eventually internalized the importance of learning to gain as many new skills as they could from their placement. Learning from the "masters of industry" became more important than performing for others. Does this internalization transfer to school work? Many said yes, it did, because they were more focused on their long term goals. They wanted to get through their last year of high school because they knew exactly what they wanted or did not want to do with the rest of their lives. Many students believed that because of co-op they understood the term "life long learning".

Students reported that life-long learning was evident in the work place. Many of the employees were constantly training for various positions while the co-op students were working there. This phenomenon influenced the co-op students' goals and they reported that they wanted to learn as much as they could in the "real world" so they would be prepared to attain their future goals. According to Dweck (1988) an ideal task within a mastery goal is one that "maximized the growth of ability and the pride and pleasure of mastery, quite apart from how one's abilities are showing up at any given moment" (p.261). The analysis of the variable "co-op students' goal" found evidence to support this statement.

The co-op students interviewed wanted to learn as much as they could in the work place to be prepared for their future and it was attaining competency in many tasks that

was their number one goal. Performing for other people (e.g., teachers, parents and employers) did not seem to be important for the co-op students. However, the study needed to investigate why students developed goals that fostered judgements concerning their performance capabilities and why co-op influenced these judgements.

Self-efficacy theory

When students make personal judgements regarding their performance capabilities they are supporting Bandura's (1977) "Self-Efficacy Theory". According to Schunk (1985), self-efficacy is believed to have very diverse effects on motivation, achievement, performance, and choices of activities. Bandura (1981) also proposed that students acquire information about their capability judgements from evaluation, experiences, and interactions. It has been proposed (Bandura, 1981; Schunk, 1985) that self-efficacy affects educational motivation. This study found evidence that co-op education affects student self-efficacy and in turn their educational motivation.

Co-op influenced self-efficacy

While investigating students' expectations and experiences it was discovered that in the work place students develop a sense of efficacy different from that of a traditional classroom. Their judgements about working capabilities tend to be higher than those of school capabilities. After only one or two positive co-op experiences students reported that their self-efficacy increased. Students reported that after their co-op learning experience was completed they had more positive judgements regarding their performance capabilities than when they started co-op. They believed they would do better on the

tasks given to them at work than they would in school. The students gave many reasons for this belief. However, the one that seem to be most significant was the employers' attitudes towards making mistakes.

Students reported that failing at a task they were learning helped them develop a positive attitude towards failure and that in itself was a sense of accomplishment. Students supported the premise that "having real adult tasks and positive performance outcomes were genuinely attributed to their effort on the job which helps increase one's self-efficacy". The co-op students interviewed believed that their performance capabilities (new skills) were attributed to their effort, strategies, and hands-on-learning at the site and these in turn, the students concluded, increased their self-efficacy.

By engaging in experiential learning, they were able to experience failure without a negative impact on their abilities. This was so because they first watched the particular task performed by a supervisor or fellow employee, then they were allowed to experience the task with some help and/or guidance. The next step in their training was to accomplish the task unassisted. Even if the first attempt was unsuccessful they were given ample time to achieve success. This form of learning allowed the students to learn from their mistakes and to lessen the fear of failure. The students developed an increase in self-efficacy because these positive efficacy cues given by employers, attributed accomplishments to effort and completion of a task, not solely to ability.

Attribution theory

Weiner (1984) proposed that positive attribution beliefs regarding performance outcomes greatly affected a student's motivation. When students ask "why did I fail this test and pass this test?", they are looking for specific reasons for success and failure. Sometimes students attribute their successes or failures to either effort, ability, others, emotions, task difficulty, test difficulty or luck. When students attribute failure to ability and success to luck they have an inappropriate attribution belief. However, when students attribute success to effort and ability, and failure to effort and strategies, they develop an appropriate attribution belief for educational motivation.

Co-op influenced attribution beliefs

The co-op students reported that in school they have many attribution beliefs which depend on the course and the teacher. However, on the job they determined after several co-op experiences that their self-confidence and their self-worth increased which allowed them to make appropriate beliefs regarding their successes and failures. When they were failing at a task, their employers and fellow employees did not concentrate on the failure per se. Rather they focused on the task at hand and how they were completing the task. The students reported that their attributions regarding failure and success changed in that they no longer attributed failure and success to being stupid or smart but to other elements. Failure and success was focused on the strategies used to accomplish the task, not on the abilities of the students to perform the task. The co-op students who experienced this form of learning on the job, reported that their feelings of competency

and pride in their work increased when they experienced success and some forms of failure.

Three students reported " I have control over my learning at the placement. I learn what is important to know about taking care of kids", " I have control over my success and failure at the job site", and "I experienced positive feelings at work that I didn't experience in school", and all of this, they concluded, motivated them to learn as much as they could while in the work place. These students reported that their employers/supervisors always told them that mistakes or failures were good because one can learn strategies from mistakes. Mistakes are not accepted in the work place if the individual does not learn from the mistake. Workers (students believed themselves to be in this category) need to understand the why and how of the mistake. Usually this means redoing the task so you can ascertain what went wrong in the completion of the task or skill.

"Breaking down skills into workable, attainable tasks" was another way for a student who was working in a computer manufacturing company, to develop an appropriate attribution belief. Co-op students believed this because they experienced immediate gratification and feedback with regard to their successes and failures. They were able to enjoy their successes and correct their mistakes as soon as they occurred. They saw how several tasks combined to develop a skill. Students did say their self-confidence and self-worth developed because knowing they were competent allowed them not to become upset when they did not succeed. One student said she did not jump to the

conclusion "I am stupid and I will never understand this stuff." However co-op students stipulated that learning from their mistakes in school was still very difficult because "most of the time we just go on to the new material, before we understand the old material, you know like math or literature." The internal attribution beliefs held by the co-op students led to the development of a sense of worth and value in the work placement and were reported to be higher in the work learning environment than in the traditional learning environment of the school.

Self-worth theory

The co-op students generally reported that their educational motivation was influenced by the feelings of worth that were attached to their performances at the work place. What students were experiencing was the need to preserve one's self-worth by focusing on the positive experiences attached to the work placement (Covington, 1984). The sense of belonging to the work place and the emphasis placed on the co-op teachers' contributions also influenced their self-worth and therefore their educational beliefs. The students reported that the responsibilities and independence the employers gave them fostered an internal motivation to succeed at their tasks. These students wanted to succeed for themselves because they wanted to learn as much as they could from the work place. This learning was important to their future careers and their future education. The co-op students concluded that tasks at the placement had meaning for their learning and that learning gave the importance and meaning for their education.

<u>Co-op influenced self-worth</u>

Many of the students proposed that co-op education developed the confidence they needed to attempt new challenging tasks. Why they felt this way amounted to the feelings of belongingness and the high genuine regard the employers/supervisors placed on the students' contributions made in the work place. The co-op students generally stated it was these expectations of employers that increased their self-esteem/self-worth and that in turn helped them to internalize the importance of being self-motivated to learn.

Co-op students proposed that motivated learning grew at the placement because they believed they were accepted and valued. The study developed a cyclical format for the feelings of worth and esteem reported by the participants. The students' co-op experiences increased their self-confidence and this self-confidence helped them develop appropriate and internal beliefs about their success and failure which developed a higher self-efficacy by contributing their successes to effort and their failures to strategies. When these beliefs were internalized the students reported that their self-worth and self-esteem increased due to the feelings of value and need.

Self-determination theory

The co-op students generally reported in this investigation that the feelings of worth, belongingness, failure and success, performance judgements and motivation to learn were also greatly influenced by their sense of autonomy. They proposed that having control over their choices in their learning activities, and finding meaning and value in these choices did happen in their many job tasks and not always in their school activities.

The meaning found at the job placement tended to be carried over into certain school subjects during the integration sessions of the co-op program. Co-op students reported choice and control over their co-op placements and activities motivated them to learn all they could while at the job site. One Level III student replied, "having control over my own selection of skills allowed me to experience a more meaningful, valuable way to learn."

Co-op influenced self-determination

There are three psychological needs that determine intrinsic and extrinsic motivation (Deci & Ryan, 1987). These needs are competency (White, 1959), self-determination or autonomy (deCharms, 1969) and relatedness or meaning. During the investigation many students revealed that all three needs were met while at the work place. Students achieved several competencies in various job-related skills; they believed they had control over their co-op learning because they could choose where they worked, and they could choose what and how they learned. But the most important need was in finding relevance or meaning in the task-at-hand. This, for many of the students, was the missing link to school learning.

When students gave meaning to the particular task they found a sense of value for education and learning. Unfortunately, the students reportedly did not always see the value of their school learning. The instances of students not finding value or meaning in their placement tasks was a small number. Of the one hundred and sixty-nine students interviewed only twenty-one students reported that sometimes the tasks had no learning

value. Many of these tasks had some value to the work place, but they were seen as mundane or boring (e.g., filing, cleaning, paper work). The co-op students reported they gained valuable competencies and autonomy in a contextual supportive environment and according to Deci & Ryan (1987), intrinsic motivation will develop and be maintained. Even though students found various values and meanings in the work place, the most important meaning for the co-op students was the linking of school subjects to the world of work. The finding of value in certain subjects that they were taking in school influenced their motivation to learn. Many students went back to school after work and tried to learn as much as they could in these particular subjects because they understood the term life long learning.

Another proposition of self-determination theory is the belief that interest and enjoyment are highly correlated with students' achievement and intrinsic motivation. This correlation was also found in the study of co-op and the educational motivation phenomenon. Students reported that because they could choose placements that interested them they were more motivated to learn from the placement. Once given the opportunities to experience new and challenging skills the students reported they enjoyed their learning and wanted to experience more of this phenomenon. The students reported that they did not learn tasks for evaluation purposes; the tasks were learned for the enjoyment and interest level of learning. Even though there was a performance evaluation it was not normative. The co-op experiences with evaluation were more informative and when the performance reviews were conducted, they were usually stress free. Students

were given the opportunity to discuss their progress and to elaborate on how they felt regarding their progression on the job. Most of the students stated that this was a very logical form of evaluation and that it could become a reality of our school system. The students internalized the importance of a self-motivated individual. Students reported that they were very determined to learn all they could about a particular career or occupation while they were in the placement. This knowledge, they suggested, would give them positive learning experiences, which might increased their confidence to achieve future goals and challenging tasks.

In concluding the discussion on theories and the influence co-op had on motivation, it has to be understood that the students who enroll in co-operative education do so for various reasons. Students enroll in co-op for the four easy credits, investigate a career they would like to pursue, to get out of a school setting, to explore a variety of careers or to familiarize themselves with the work place. No matter what the individual intentions for taking co-op were, all one hundred and sixty-nine students were adamant in their responses that the co-op experience was the most worthwhile program of their whole schooling career.

With respect to the overall findings, co-op students reported they were influenced by their co-op experiences. The influences were as varied as the students and co-op programs themselves. A small number of students believed the co-op teacher had the most influence, while others proposed that it was the co-op placement that influenced their motivation. However, the majority of students proposed that it was the actual

placement/employer, the co-op program and the co-op teacher together, that had the greatest influence on their motivation.

The students feelings, actions, and their competencies at the work site were associated with the five motivational theories of goal, attribution, self-efficacy, self-worth and self-determination. In this regard all the components of the individual theories were converted into variables that could be investigated. One hundred and sixty-nine students (100%) had some evidence or reason to give this study concerning their co-op experiences. The three elements of the program were the administration sessions of the course, which for the purposes of this study, were called the co-op program, the co-op teacher/monitor and the co-op placement/supervisor. Only a small number of students did not find their placement interesting or valuable but they did say they learned some skills while working there and these skills were of a more interpersonal nature. Many other variables were confirmed to have influence on the co-op students motivation. The variables labeled benefits, experiences, self-worth/esteem, responsibilities, skills, control and choice, value, relevance, meaning and interest, enjoyment, expectations of students, co-op teachers and employers, attribution, competency, beliefs of performance, and qualities of a co-op teacher each had some level of influence on the students' achievement and motivation. However, many of the students interviewed proposed that the experiences gained in the work placement, the co-op teachers' qualities and the co-op programs' integration and pre-employment sessions had the most influence on their motivation. These students proposed that the meaning and value placed on their

contribution to the placement influenced their change in educational motivation because they had independence and responsibilities for the first time in their learning careers.

Motivation

Co-op influenced independence and responsibilities

Many students proposed the benefits of independence and responsibilities had an effect on the confidence gained and skills mastered at the placement which also influenced their motivation. It is interesting to note that even bad experiences influenced the students' motivation, in that, students reported some placements were not what they expected or the experiences were not that valuable, and this in turn, encouraged them to do better in school or rethink their career goals so they would not have to do that particular work for the rest of their lives.

Students who proposed the co-op teacher influenced their motivation were adamant that a caring, nurturing teacher was the most effective teacher. If a teacher had this quality then all the other qualities (e.g., respect, creativity) would be forthcoming. These students also proposed that the co-op teachers served as role models for the working environment in that these teachers exemplified a positive attitude towards their work, which was manifested in the teachers' behaviour at school. Many students were willing to concede that the co-op placement had an influence on their motivation because they did make links to and find meaning for their job tasks. However, for the most part it was their co-op teachers' qualities that had the most influence on their motivation. The majority of these students reported that not all teachers possess these qualities of caring,

nurturing, enthusiasm and motivation, but if all teachers did, they would probably be more motivated to achieve success in their courses.

Co-op influenced motivation

Many of the co-op students reported that because of the influence co-op had on their self-efficacy, attribution beliefs about failure, self-worth, self-determination and goal orientation their motivation was also increased. Many students proposed it was the co-op placement that had the most influence over their motivation. They determined that the co-op teacher had certain effective qualities but that was not why they wanted to succeed in co-op. These students, for the most part, wanted to learn as much as they could about the world of work and for these students that meant their placement or employers. Co-op experiences, expectations, skills, benefits, control, choice, meaning and relevance of learning all had an important role to play in their decision to do well in the rest of their high school year.

Students reportedly believed the expectations of a co-op placement and all the learning experiences at the work environment were a meaningful ones. Students at co-op were generally mastery.goal orientated, in that, they wanted to learn to achieve not for someone's perceptions of their performance but for their own capabilities and growth. Many of the students replied that they had developed long term goals at their placements. The following were deemed important reasons to the students for developing goals at the placement. "I wanted to see if my placement learning would help me reach my goal of becoming a doctor." Another student reported " the co-op placement met my

expectations because my supervisors had a wealth of knowledge that they were willing to share." A student stated , "most of the learning was meaningful and valuable to my future."

The study found that it was a combination of good task structure, meaningful integration sessions, good instruction by the co-op teachers and employers, relevant activities, valuable and meaningful tasks, and good instructor's qualities that enhanced a student's motivation to learn. The students reported it did not matter if the learning experience was in school or at work, as long as the above combination was present.

The final point made by the students, of interest to this discussion, is that motivation is an individual decision and that intrinsic or extrinsic motivation will become important when the students see meaning or value for the motivation. The analogy of being motivated to drink or do drugs was used by one student.

> Teenagers continue to drink or do drugs because it a) makes them feel good, b) gives them courage to do things, c) helps them fit in with their peers, or d) gives them something to do on a boring night. I believe that students are motivated for almost the same reasons. But co-op students have the experiences first and then they continue to be motivated. Students first experience motivation for several reasons; a) they like/respect their teacher which makes them want to do well in the class; b) they want to impress their peers or parents; c) they like what they do; d) they find learning is fun and it has meaning and value for them; or e) they have a need or desire to learn and so they fulfill the need/desire. However during these experiences many of us experience positive feelings and these feelings of pride and competency outweigh all the other reasons for wanting to learn and succeed. Therefore many of us co-op students started to learn for these self-gratification feelings and that helps our competency level, which increases our self-confidence and need for new challenges.

This student's analogy is a very simplistic analysis of the motivational theories, however, somewhere in this young girl's mind is a simple truth. Students are motivated to do many things in their lives. However, when asked why they believed over 75 % of most schools' populations were not motivated to learn every subject they were taken, they replied, "it's because the courses we do are so boring and stupid", "the teachers don't respect us", "we feel stupid when we fail", and "we never get a chance to correct our mistakes and get a better grasp of the concepts we're suppose to learn." The participants also suggested that many students saw no relevance for the subjects' objectives in their lives or meaning in the way certain teachers use the learning experiences' activities. In order to overcome this lack of desire or drive to learn certain programs or courses needed to be redeveloped or cancelled so more relevant and meaningful courses could be implemented. These same participants (76%) also reported that certain teachers needed to reevaluated their teaching methods (the way they teach the courses) so as to ensure that relevancy be a part of what and how they teach. The 169 co-op students proposed a number of recommendations that would help improve the general school curriculum with specific guidelines for student motivation.

Charter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter contains a summary of the study and its research findings, while outlining conclusions drawn from the study, delineating recommendations for future studies, and enumerating students' recommendations for high school curriculum development.

Summary of the study

This thesis found evidence in the data to support the claim that co-op programs enhance motivational learning due to programs being structured differently than classroom courses. Students postulated that the co-op experiences fostered competencies and developed links between school subjects and work skills. The students confirmed that the co-op programs enhanced their motivated.

The study also found evidence to support the premise that students' motivation for school was different than for co-op. Students admitted that school was a place they had to go; it was often described as being a boring, unmotivating environment, and that the learning and subjects provided were not seen as valuable or meaningful. Participants did remark, however, that school was rewarding for its social benefits and the extra-curricular activities that were a part of their school lives. However, students generally reported that they received valuable, meaningful experiences, and enjoyed relevant learning opportunities at their co-op placements. Students maintained throughout the study that the learning activities engaged in during co-op fostered self-esteem, confidence,

independence, responsibility, loyalty, belongingness, and increased work ethics and dependability.

Through students' testimonials, the study developed a vision of what school would look like if it was reformed with co-op students input. This vision would see school become a place where learning was a "way of being" (Seifert, 1995). Education would take a holistic approach to learning. Cognitive and emotional aspects of the students' lives would be developed.

The findings support the premise that students need to feel a sense of belonging to their school. They need to be valued by their schools. Students want more responsibility for their school activities and learning. This responsibility was generally viewed as very important to the co-op students because they had been encouraged by their employers to take ownership of their learning at the work placement. Students wanted schools, and more importantly classrooms, that provided meaningful and relevant learning; they admitted that tasks in the classrooms have to appear to be valuable so the activities are seen as foundations for life long learning.

Students stipulated to be good, effective role models classroom teachers needed similar qualities to those that were held by employers. For the co-op participants these qualities meant teachers had to be caring, nurturing, motivated, enthusiastic, creative, and possess a sound teaching philosophy (i.e. methods, strategies and techniques). Teachers had to possess a willingness to listen to the students and be able to instill in students a sense of value and belonging in the classrooms.

The study discovered that students wanted to enjoy school and the activities they engage in while in the classroom because they learned from co-op that learning can be fun. To achieve this enjoyment in school, students reported they had to have choice and control over their learning and freedom from fear of failure. These co-op students experienced, at their co-op placements, many learning situations that were viewed as enjoyable; students envisioned high school courses based on these challenging and pleasurable placement activities. These co-op learning activities were enjoyable because they were relevant, meaningful, and valuable to the students' future plans.

Studd (1985) states, "We are developing school graduates who have next to no experience, who have little knowledge of the jobs available to them, who are unaware of their interests and abilities and who will experience difficulty with on-the-job relationships" (p.5). The findings of this study have shown that co-op students do experience knowledge of jobs, are aware of their interests and abilities and do develop on-the-job relationships. The study confirmed that co-op education permitted students to learn the demands and requirements of employers while still studying in high school. Given the philosophical thrust of the current educational reform in the province of Newfoundland and Labrador, if the transition of school to work is important, then surely our students deserve programs that bridge the gap between school and work.

Conclusions

Based on the findings of this study the researcher concludes that the co-operative education programs offered in the province's school system are very valuable because

students' behaviours and learning are positively affected by these programs. During the investigation, students confirmed that co-op had an influence on their educational motivation and they learned much more from their co-op experience than they perceived they would. It may be concluded that: 1) students maintained they were less motivated to learn in school than they were at work; 2) students perceived they were treated differently in school than at work; 3) students stipulated that co-operative education had an influence on their educational motivation and learning; 4) students perceived that learning in a work placement is structured differently than in a classroom; 5) students admitted that failure in school was stressful and heavily attached to only their abilities; 6) students concluded that failure at the placement was perceived as a learning experience, and; 7) students confirmed that the learning in a work placement is more beneficial, meaningful, valuable, and relevant than most classroom learning.

The study found that co-operative education influenced student motivation because of three major co-op components: the co-op in-school program, the co-op placement/employer, and the co-op teacher. Ninety-one participants confirmed that a combination of all three co-op components had the most influence on their educational motivation. Sixty-one students confirmed that the co-op placement/employer had the most influenced on their learning motivation, while seventeen students confirmed that the co-op teacher had the most influence on their learning motivation.

It may be concluded that co-op learning is structured very differently than traditional classroom learning and the differences are maintained throughout the full high

school curriculum. The first difference is the choice and control the students experienced from the beginning of co-op programs. This initial experience with choice and control fostered independence and autonomy within the students and this autonomy increased expectations for the co-op placement. These expectations, for the most part, were either met or went beyond many of the initial student expectations. The students reported that their motivation was influenced by co-op because they had a very important reason to learn while they were in the placement.

The findings indicated that the students most important motivational reason for choosing co-op was to gain as much experience while working in the particular field so as to be better prepared for future employment. Students found value and meaning in learning at the work place, something which they did not always find in school. The theories of goal, attribution, self-efficacy, self-worth and self-determination put forth in this study, helped students describe why co-op education influenced their educational motivation. They could not explain which came first, the motivation to learn, or the need to have motivation; a student commented, "it's (motivation) like which came first, the chicken or the egg, who really cares, we eat don't we." Many students stated it did not matter which came first, or which variable had the most influence on their motivation, what mattered was the change in their motivation while at co-op.

The study concluded that co-op fosters self-worth and self-efficacy, gives students autonomy, meaning and value for their learning, encourages students to engage in learning goals while in the work place, and helps them develop attribution beliefs that are

appropriate for effective learning. The co-op programs have good instructional, meaningful activities which are developed by students, employers and co-op teachers. The co-op program offered good task structure in its learning activities and many of the co-op teachers and employers possess qualities that fostered good role modelling techniques.

The thesis concluded that the quality of the co-op students' job experiences at the placement had a positive influence on their motivation. Students confirmed that having the opportunity to experience hands-on training was a beneficial way of learning new skills. The co-op students confirmed that the meaningful learning acquired at the placement actually motivated them to engage in challenging tasks while at the job site. The work placement gave the students responsibilities and independence that fostered and/or increased their self-confidence and that, in turn, allowed the students to accept new and varied challenges. The feelings of pride, belongingness and accomplishment that the students felt from the work placement motivated the students to work diligently at their job tasks. One hundred and fifty-four students reported developing a quest of learning at the placement because they knew the tasks they accomplished were genuinely appreciated and valued by the employers. These students perceived that this increase in motivation to learn caused feelings of self-worth and self-esteem to increase if low, stay the same if high, and develop if no such feelings existed.

The study concluded that the co-op learning experiences were designed to make links between the subjects taught in school and the tasks on the job, and between success and failure at work and in school. Students made links to work (tasks) and learning which

developed into appropriate reasons for learning particular information. Most of these links

came from the students themselves, but the programs provided a way to communicate to

all students the necessary information.

The research found that during co-op there was often a change in students'

attitudes towards failure. The students believed that the feelings of inadequacies felt when

they failed in school did not apply to the work world. The students discovered that if they

failed, it was not always due to their abilities, merely to the way they performed or

interpreted the task's steps. Students' perceptions of failure were generally linked to

employers' attitudes towards failure and success. Students reported that employers

tended to have a nurturing quality towards failure and this quality was an affect technique

for motivated learning.

It may also be concluded that many classrooms did not embrace what motivational

theory proposed. Students admitted that meaningful and relevant tasks were not always

found in the regular class setting . Students remarked that they had no sense of control or

autonomy in the classroom activities or learning. This lack of autonomy, students

reported, had negative influence on their educational motivation. One hundred and six

students concluded that they were not willing to learn more challenging tasks at school

because of how they were treated by the whole school system. One hundred and sixty-

two students perceived they were treated with respect at work and they were given plenty

of relevant meaningful tasks which fostered independence, responsibility and confidence.

However, these same students, were quick to admit that when it came to activities at

school, there was no comparison. The classroom activities were often boring, filling-in-time tasks that had no relevance, meaning or value for them as students. Students often suggested that if they were given the same learning opportunities in school as they were in co-op, they would experience success in school which would give them the confidence to accept more challenging tasks without fear of making mistakes.

Co-op students were generally motivated to learn challenging tasks at the work placement because they attributed failure to lack of practice, strategy and effort and success to ability, effort and strategy. Students developed feelings of pride, respect and belongingness in the work place which they reported were not developed in many of the classrooms in school. The students reported that these feelings, acquired while at the co-op placement, increased their self-worth which, in turn, motivated them to accept challenging tasks. Students reported that success at work resulted in feelings of accomplishment and pride and these feelings were not experienced in school. Pride, self-worth, respect and belongingness had a positive effect on the students' self-efficacy which motivated the students to attempt challenging tasks at work. The students repeatedly reported they could achieve at the work placement and this belief did not transfer into the classroom setting until the co-op teacher helped the students make the link between learning at work and learning at school.

Most students admitted they had none or very little control or autonomy in classroom learning activities; however, the opposite was true for the work placement. Students found that tasks at the placement generally had meaning and value for learning.

Meaningful, relevant goals were set in the placement while classroom goals were often seen as boring and irrelevant.

In school many students learn, perform and achieve for their peers, parents and teachers. Many more students try to achieve and learn to avoid appearing incompetent or stupid. However, at the placement, most of the students reportedly believed that they learned, performed and achieved because they wanted to learn as much as they could from the "masters of industry" or the workers who actually did the work "in the real world", the world in which they will eventually find careers. Students were learning for the sake of learning, accepting challenging tasks and achieving success because they wanted to learn as much as they could while they had a chance to do so. To these co-op students, much of the classroom learning did not encourage or motivate them to learn the same way as co-op did.

Students generally maintained that regular classrooms need to be structured the same as co-op programs, in that classrooms need to be motivational learning environments. To accomplish this classroom structure overhaul, attention has to be paid to the theories of goal, attribution, self-worth, self-efficacy, and self-determination. If all classrooms espouse mastery goals, develop learning activities that are relevant, valuable and meaningful, encourage positive cues for performance competencies, focus more on effort, ability and learning strategies, place emphasis on the appropriate reasons for failure, develop feelings of belongingness and value to a classroom, and encourage students to

take control and autonomy over their learning, then students' classroom motivational learning will likely be enhanced.

Recommendations

The researcher makes the following recommendations based on the results and conclusions of this study:

1.) That all students within the province of Newfoundland and Labrador be given the opportunity to avail of the co-op programs.

2.) That co-op programs become a part of the high school curriculum, independent of federal financial support.

3.) That the benefits of co-op be presented to the high school curriculum restructuring committee.

4.) That all high school subjects develop a co-op component so as to link course objectives to work site activities.

5.) That the province of Newfoundland and Labrador's education department be made aware of the many motivational and educational benefits of co-op.

6.) That the ten English school boards in the province of Newfoundland and Labrador be given the opportunity to incorporate into all their schools' curriculum some form of a co-op program.

7.) That serious consideration be given to the recommendations given by the co-op students who participated in this study.

Recommendations for further studies

1.)   It is important to understand that all students who were interviewed for this study

were co-op students. There was no comparison made of these findings to regular

classroom students even though co-op students are part of the general populace.

In order to generalize the findings of this educational motivation phenomenon,

another study would be needed to compare regular classroom students to co-op

students and investigate if their motivational beliefs varied.

2.)   Further research could be conducted into the future or potential motivation of co-

op students. Track co-op students and investigate their educational motivation

after they have graduated from high school. This would establish the importance

of co-op experiences on long term motivation.

3.)   Further research could be conducted by using a quantitative approach to acquire a

casual or correlative relationship into the effectiveness of co-operative education

on students' motivation.

4.)   Further research could be conducted by a non co-op teacher to ascertain if the

investigation's findings are due to the co-op program influences or the

investigator's probing.

Students' recommendations

During the interviews the researcher asked the co-op students if they had

recommendations for the Minister of Education. One hundred percent of the participants

admitted that at least one if not more of their high school courses were not relevant or

meaningful for their present and/or future educational plans. The students were adamant in their beliefs regarding the high school curriculum in that they perceived that many of the courses were out-of-date and not appropriate for the twenty-first century. Co-op students also concluded that the skills needed to become life-long-learners were not being developed in the high schools' curriculum. All the co-op participants felt that somehow students must be involved in the development of the new high school curriculum being undertaken by the department of education. Below are the consensus of the recommendations made by these one hundred and sixty-nine co-op students:

1.) Students recommended that more co-op courses become options in schools because many classrooms are often unmotivating, boring environments. More emphasis needs to be placed on developing meaningful relevant learning activities. and. Teachers must be aware that students need to develop a sense of the value of and belongingness in the classroom environment in order to achieve motivation to learn and this is often achieved by nurturing, caring classrooms. A sense of self-worth and self-efficacy must be developed in a nurturing and caring environment and in turn, students will likely be motivated to engage in challenging and meaningful learning tasks. Students must perceive that they have autonomy and control over their learning which will enable them to make the links needed to find relevance and meaning in their school activities.

2.) Students recommended that school become a place where they are motivated to learn for the future. They perceive that school should be more like their work

placement because relevant learning activities are important to their future. Therefore, school tasks must be meaningful and valuable just like the meaningful and valuable tasks given to them at work. Students recommended that teachers need to respect and value students' contributions to the classroom environment because this input is relevant and this would encourage the students' motivation to learn.

3.) Students recommended that entry into co-op programs should be by choice. Courses that have no relevance or meaning are intrinsically uninteresting, and that fosters lack of motivation and boredom. However if the co-op program was developed so as to encourage students to find a meaningful learning experience at the work placement, then this learning experience may be transferred to classroom learning.

4.) Students recommended that more co-op or similar types of programs be introduced into the curriculum so as to allow as many students as possible to experience hands-on learning, which influences students' future education and career goals. Students believed that co-op or similar programs provide meaningful learning which fosters confidence and self-worth, and encourages students to develop appropriate beliefs concerning success and failure.

5.) Students recommended that if increased co-op programming was not a possibility, then teachers needed to develop meaningful, relevant tasks into the present school curriculum. Students perceived that if the school system actually allowed students

real choice in their courses then they would be motivated to learn all they could from these courses. Students knew most of the courses taken in high school are required by government for graduation purposes. Students recommended that a meaningful learning experience like co-op would help the unmotivated student. If unmotivated students were given the opportunity to enroll in co-op, they would experience meaningful learning that would help change their attitudes towards learning in school.

6.) Students recommended that co-op programs should be offered to the students who are not doing well in high school. One student recommended that underachieving students may have low self-confidence and that is why they are not performing. Therefore, if they are given a co-op placement, their positive experiences would increase their self-confidence and they would experience success.

7.) Students recommended the Department of Education bring in more relevant and meaningful courses. Offer science, math and other courses that can be linked to the outside world, careers and life in general. Also, more up-to-date courses need to be introduced into the high school curriculum. However, teachers who instruct these new courses must have experience in delivering these particular innovative programs.

8.) Students recommended that an overhaul of the courses be completed by all schools, so as to develop courses that would be important to future career and

educational goals. They wanted learning tasks, goals and curriculum in all schools to offer choice in activities so students will develop a sense of belongingness in their learning environment.

9.)   Students recommended that more money be placed in our educational system. Students needed to see evidence that the Government of Newfoundland and Labrador really believe education is the first step into a prosperous future. Taking funds from education or not giving enough funds to the educational system show students government does not see education as a priority. Government's lack of educational vision cause students to perceive that education need not be a priority for them. "Cut backs limit our future, they (government) are limiting our choices; if we do not have a meaningful education we will not be able to compete for jobs" or "learn what is needed for global competition."

10.)   Students recommended that teachers need performance checks and more teacher evaluations need to be conducted. Students found that teachers need to develop learning tasks that are meaningful and relevant to the students' goals. Teachers must change their teaching methods and techniques. Teachers need to be more caring and nurturing towards the students' learning and teachers have to help students link the relevance and meaning in particular courses. If students have to be evaluated every semester and year, so must teachers.

11.)   Students recommended that professional development and upgrading become a way of updating teachers' skills and knowledge . In the private sector employees

have to keep up with the changing working environment; therefore teachers also need to be updated to the changing educational environment. Students postulated that teachers must be able to give students choices in their classrooms similar to the world of work. More collaboration between teachers and students regarding classroom activities need to be undertaken. Students admitted they needed to have a sense of belongingness in their day to day classroom learning; teachers need to see how valuable the students' contributions are to the classroom. Allowing students to learn from their mistakes was also seen as very important to the co-op students. The students believed that teachers and students together can develop ways and means to learn from mistakes, thus increasing student motivation.

12.) Students recommended that the education department, boards and schools replace certain texts that they considered outdated and useless. These texts are spread over the whole curriculum; however, special emphasis on this point was placed on literature and social studies courses. If the books were updated, they would have more relevance and meaning for the students. While in the work place, these students experienced up-to-date learning materials and activities. They also perceived that texts may not be needed for instruction, only for reference. More emphasis needs to be placed on present day trends and issues. Therefore more up-to-date learning resources must be developed for all high schools.

13.) The co-op students recommended that a new form of performance evaluation needs to be developed. Focusing on tests, quizzes and exams is

counterproductive. While in the co-op placement, students discovered a more effective form of evaluation. Classrooms need to develop more informative ways of evaluating as opposed to normative. When schools place emphasis only on the outcomes of learning, it limits the wide variety of learning that happens during the course of a program. When students fail at something, it is more productive to learn from the failure than it is to worry about how the failure will affect their average. Students recommended that learning which concentrated on knowledge for exams does nothing for the students' learning goal orientation. Co-op students have noticed that learning is for competency or proficiency at a skill and not for exam knowledge. Students admitted that if high school focused on the experiences learned in classes and not on how much you knew at the end, students would want to gain more knowledge regarding relevant skills.

14.) Students recommended that less time needs to be spent in certain classes because the tasks were not meaningful or relevant. Students found that only thirty minutes of a fifty minute period was actually spent on learning new material. "People might enjoy going to school more if the time table was the same as a university schedule." If the time slots were a student's choice many students would choose to come to school to learn because they only have a certain amount of time to master a set amount of new material. Instead of a 2 month summer holiday, students would prefer a three week break in between semesters. Students could

then choose courses they needed or wanted for future education or careers and they would have a more concentrated and focused high school education.

15.) Students recommended that more attention needs to be given to learning strategies. All of the students recommended that students who learn from doing must be given the opportunity to experience this form of learning. The students recommended a type of hands-on learning for all courses so that students would see the relevance of mathematics or science in the real world. The co-op students maintained that this form of a curriculum built a bridge that linked course objectives to work related skills. Students perceived that if they could go out to a placement where mathematics and science are used everyday, students could develop useful learning material that would enhance their learning strategies and knowledge.

16.) Students recommended that all students be given the necessary skills needed to develop effective study habits. The co-op students reported they learned through their placement that intelligence is not always enough to guarantee achievement at work or school. Other elements are needed and the co-op students recommended that study skills are a necessity for all students and attention to effective study habits needs to be addressed by teachers and students alike.

17.) Students recommended co-op to all students and stated that the meaningful, valuable experiences gained, the motivated learning, the increased self-confidence and challenging, innovative skills learned, outweighed the extra work that had to

be completed. Working after school hours was a bonus, not a chore. The students commented that if students had a choice to do a co-op program then more students would be motivated to achieve success in learning.

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Appendix A

Student Questionnaire

1.) What does Co-op mean to you?

2.) What does the term motivation mean to you?

3.) Define intrinsic/extrinsic motivation

4.) What do you think are the benefits of your co-op program?

5.) What was your main reason for participating in your co-op program?

6.) Is there anything more you would like to add about motivation?

7.) How have your co-op experiences developed?

8.) How have your perceptions of school life changed during your co-op experiences?

9.) What have you learned about yourself during your co-op experiences?

10.) Work motivated me because-----. (if no motivation move on)

11.) My employer motivated me because-----.

12.) My co-op teacher motivated me because -----.

13.) My outlook on learning has changed etc -----.

14.) My outlook on life has -------.

15.) My self-worth has ----------.

16.) My beliefs about failure -------.

17.) I have control over what in school-------.

18.) Co-op has meaning for me because-------.

19.) How have your motivation beliefs changed after your co-op experiences?

20.) What was the most important benefit you gained from co-op experiences?

21.) How did co-op influence your school life?

22.) What was the most worthwhile experience you had during your co-op placement?

23.) What advice regarding motivation would you give to a student who wanted to apply for a co-opposition?

24.) How did your co-op teacher/monitor affect your level of motivation?

25.) How did your placement/employer affect your level of motivation?

26.) Which of the major elements of co-op has had the greatest influence on your motivation and why?

27.) What else do you want to add to this focus group?

28.) How did your co-operative education program affect your level of motivation?

29.) If co-op changed your motivation, how and why did this change happen?

30.) How and why does co-op give meaning and worth to school?

Appendix B

Probing Questions

1.) Suppose you were on a student task force and the Minister of Education would implement one of your recommendations, what would you tell the minister?

2.) You have a chance to change the curriculum. What changes would you make?

3.) What percentage of your school population would be bored with school?

4.) How would you alleviate boredom in our school system?

5.) Name at least two subjects that you do not find boring.

6.) What two subjects can you relate to the world of work.

7.) What is the difference between intrinsic and extrinsic motivation?

8.) What elements of co-op do you think enhance motivation?

9.) Why is co-op important?

10.) Why is it important to study the world of work while you are still in high school?

11.) Do you enjoy co-op? Why/why not?

12.) Do you like school? Why/why not?

13.) Is school boring? Why/why not

14.) What makes teachers effective or ineffective?

15.) Why do you feel bad when you fail?

16.) Why are peers' beliefs important to you?

17.) Why is doing well important to you?

18.) What makes you feel important in school?

19.) What makes you feel important at work?

Appendix C

Variables

Motivation

Experience

Expectations

Control

Choice

Self-worth

Responsibility

Attribution

Teacher Qaulity

Influence

Benefits

Skills

Goals

Meaning

Value

Confidence

Appendix D

Attribution Questions

1.)   When do you think your beliefs about failure and success started?

2.)   What do you think adds to your successes?

3.)   What do you think adds to your failures?

4.)   What are your feelings when you succeed or fail?

5.)   What are your beliefs about teachers attitudes towards your success or failure in school?

6.)   How do teachers' attitudes towards your performance affect your success or failure?

7.)   Why do you think you do badly? (school, work)

8.)   Why do you think you do well? (school, work)

9.)   Do you know what learning strategies are? Do you use strategies?

10.)   Do they add to your success or failure?

11.)   How do they affect your success and failures?

12.)   What are abilities, competencies, persistence and hard work?

13.)   How are they important to your success or failure?

14.)   How important are hard quizzes and final tests to your success and failures?

15.)   Is there anything you wish to add to your responses about school success and failure?

16.)   Do you view success on the job different from school?

17.)   How about failure on the job? Is this different from school? Why/not

18.)   Do you have different feelings when you succeed or fail at work, than you have in school? What are they? Are they more important than school feelings?

19.)   Do you enjoy work? Why?

20.)   Is it important to succeed at work? Why?

21.)   Did co-op affect your attribution beliefs? How? Why?

Appendix E

Self-Efficacy Questions

1.)   Can you define self-efficacy? Give a simplistic meaning.

2.)   When does self-efficacy develop?

3.)   Why is self-efficacy important to school work?

4.)   Are you a competent student?

5.)   What makes you a competent student?

6.)   Are you able to handle your courses? Why?

7.)   Are teachers' quizzes and exams important to your doing well? Why/ why not?

8.)   What abilities do you need to be successful in school? Work?

9.)   Are there differences between your work competencies and school competencies? Why?

10.)   If yes, are these differences significant to your self-efficacy?

11.)   Did co-op add to your self-efficacy? Why? How?

12.)   Will you pass high school? What will be your average?

Appendix F

Expectation Questions

1.) What are expectations?

2.) When are expectations developed?

3.) What were your expectations for school?

4.) What were your expectations for work?

5.) Did your expectations for school change while in co-op? Why? How?

6.) Did your expectations for work change while in co-op? Why? How?

7.) Are your teachers' expectations important to you? Why?

8.) What did you expect from your high school teachers? Were they met? Why/ Why not?

9.) Are your employers' expectations important to you? Why?

10.) What did you expect from your placement? Were they met? Why/Why not?

11.) Did co-op affect your school expectations? Why? How?

Appendix G

Goal Questions

1.) What were your goals for Level II/III? Did you attain them? Why/Not

2.) What were your goals for co-op? Did you attain them/ Why/not?

3.) Do you like learning new things in school? Why/Why not?

4.) Why do you learn in school? Is it important to you? Why/Why not?

5.) Do you try hard in school for good grades or to learn all you can while you are still in school? Is there a difference? Why?

6.) Do you do well to impress yourself, your parents, your teachers or your peers?

7.) Do you work hard in school? Why/Not?

8.) Why is it important to perform in school?

9.) Why do you learn new things?

10.) Do you like learning new things at work? Why/Not?

11.) What have you learned about your learning while at work?

12.) Do you work hard at work? Why/Not?

13.) Do you learn at work to achieve skills? Why is that important?

14.) Why is learning new skills at work different from learning new skills at school?

15.) Are co-op goals more important than school goals? Why/ not

16.) At work do you try to do well to impress your employer? Why/not?

17.) Did co-op change your reason for learning? Why/why not?

Appendix H

Control/Choice Questions

1.) What do you have control over in school?

2.) Why is it important to have some control over your learning?

3.) What does control over learning do for your confidence?

4.) How can you have control over your learning?

5.) What do you have control over at work?

6.) How does that make you feel?

7.) Did your learning at school change because you had control over your learning at work? What were the changes?

8.) What choices did you make about your learning at school?

9.) Were they seen as important choices? Did they effect your learning?

10.) If you could make choices about your learning in school what would they be?

11.) What choices did you make about co-op?

12.) How important were these choices? Why?

13.) What major decisions did you make at work?

14.) Were they seen as important choices? Did they affect your learning?

15.) Did co-op change your attitudes learning about choice and control? Why/Not? How?

16.) What does choice do to you confidence?

Appendix I

Worth/Relevance/Meaning Questions

1.)   Do you like school? Why/Not?

2.)   Do you find school boring? Why/Not?

3.)   How important is what you are learning in school to your future career plans? To your future life plans? Future education?

4.)   How many interesting subjects do you take in school? What are they?

5.)   Do you like your placement? Why/Not?

6.)   Do you find work boring? Why/Not?

7.)   How important is what you are learning at work to your future career plans? To your future life plans? Future education?

8.)   How many interesting skills are you learning at work? What are they?

9.)   Why is interest important to motivation?

10.)   Which do you enjoy more, co-op or school? Why?

11.)   Did co-op change your outlook on school? How? Why?

Appendix J

Co-op Influences

1.)   Did co-op influence your motivation? How? Why?

2.)   Did your co-op teacher influence your motivation? How? Why?

3.)   Did your placement influence your motivation? How? Why?

4.)   Why is co-op so important to high school?

5.)   Why are co-op skills learned at the placement so important to your motivation?

6.)   Why are you motivated to learn at work? At school?

7.)   Which element of co-op influenced your motivation the most? (Placement/employer, co-op teacher, co-op course.)

8.)   Are the learning experiences at the placement different than the ones in school? How?