Meaningful Learning: A Case Study of Chinese International Students at the University of Victoria

by

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B. Sc., The University of Electronics Science & Technology of China, 1994

A Thesis Submitted in Partial Fulfillment of the

Requirements for the Degree of

MASTER OF ARTS

in the Department of Curriculum and Instruction

Supervisor: Dr. Kathy Sanford

ABSTRACT

This case study explores Chinese international students' perceptions of meaningful learning. Ten Chinese international students, who have post-secondary educational experience in both China and Canada, and five student services staff participated in this study. Data triangulation and method triangulation were used in this study. The study identifies four major themes found in student perceptions of meaningful learning: Practical Learning, Learning Under Pressure, Comfortable Learning, and Active Learning. This study indicates a positive relationship between out-of-school experiences and meaningful learning for international students. It reveals that students are aware of the important influence of the learning environment in their motivation and learning. This study challenges the stereotype of Chinese learners and highlights their preference for active learning over passive learning. The implication of this study emphasizes combined efforts of students and educators in co-constructing meaningful learning. The paper ends with the researcher's self-reflections on how this study affects her meaningful learning.

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Acknowledgements

I wish to thank Dr. Kathy Sanford, my supervisor, for her professional guidance during the past two years. With her practical support, thoughtful advice, and caring consideration, she has helped me overcome various difficulties in pursuing my meaningful learning. I thank Dr. Myer Horowitz, Dr. Joan Martin, and Dr. Tim Hopper, my committee members, for their kindness, encouragement, and challenge. I am especially indebted to Dr. Joan Martin's detailed critique in the content and editing of this thesis.

I wish to attribute my thanks to all the participants of this research, for their generous support and valuable input. Of the ten student participants, I am especially grateful for Fang's spontaneity and Ding's kind support even when he was extremely busy in his schoolwork.

My special thanks go to three professors outside my committee, who have provided unyielding support for my study and personal growth. Dr. William E. Doll, Jr., with his nurturance, great patience, and insightful critique, has deeply influenced my way of thinking and attitude to life. Dr. Eliza Churchill, my former supervisor, with her imagination and enthusiasm, has enabled me to see myself more positively and differently. Dr. Hongyu Wang, who offered me generous help and thoughtful comments even when she was sick, has shown me the power of sharing and openness.

This research is also indebted to my friends in Victoria, who have always given me a hand whenever I needed them. I thank Citing Li for her invaluable help in checking my English translation of Chinese data, in editing and writing. I thank Chinhsiu Chen, for giving me warm friendship and constructive advice from my first day in Victoria. I appreciate SheilaRose Richardson for her love and care like a family member. She edited my draft on a short notice. Thanks also go to Rong Ke and Ivana Cavallo, for their vivid spirit and sincere friendship.

Finally, I am grateful to my family and friends in China and my boyfriend Abram Hindle. They give me unconditional love and support, and keep on bringing new meaning to my life.

DEDICATION

For my parents

Guanzeng Luo and Huifang Liao

CHAPTER 1 INTRODUCTION

There is a trend in the People's Republic of China (China) for more and more people to go abroad to study. Statistics from the United Nations Educational, Scientific, and Cultural Organization (UNESCO) indicate that by the end of 2000, China was the country with the largest number of students learning abroad in the world: of a total of 1,600,000 international students studying abroad in 108 countries, more than 380,000 of them are Chinese from Mainland China, as cited in news report "Zhongguo chengwei" (2002). The number of Chinese international students is still increasing dramatically every year. The majority of students has also begun to shift from individuals in their twenties to those in their teenage years. A news report shows that, from the 1990s, more and more Chinese students went abroad for undergraduate degrees, or secondary or elementary or even kindergarten education ("Toushi", 2001). Recently, a new tendency has emerged in China: some Chinese students are seeking opportunities for studying abroad although they have offers or are already enrolled in Chinese universities and colleges ("Yang wenping", 2001). All the above phenomena reflect that the opportunity to enrol in university/college education is not enough; it is more desirable for some students to study abroad. In some ways, studying abroad is more meaningful for them.

In my understanding, there are both non-educational and educational factors that lead to the increased participation of Chinese students in international studies. Non-educationally, there are three major reasons. The first is the enhanced financial ability of Chinese resulting from economic development, mostly in the 1990s. Now, many families in China, especially in the east and south regions, can afford the annual fees (at least $20,000 Canadian, including tuition fees and living costs) for an international student. The second reason is the preference among Chinese for foreign degrees. With the current open-door foreign policy of China, more and more international companies are setting up branches in China. Meanwhile, economic globalization also pushes Chinese companies to extend their overseas markets. Consequently, the person with study or work experience in a foreign country is welcomed by this changing labour market. The third reason for Chinese students to move abroad is related to the limited post-secondary educational opportunities in China. In 2002, based on Chinese government statistics, only 13.3%

Chinese people aged from 18-22 enrolled in post-secondary education ("Zhongguo baixing", 2002). Students need to study extremely hard to be admitted to a popular Chinese university.

Educationally, many Chinese advocate learning abroad because they believe it will result in more meaningful learning experiences for themselves or their children than Chinese education would. Chinese news reports suggest that many Chinese think: (1) foreign educational institutes have a higher educational quality, because they facilitate genuine learning and cultivate practical ability; (2) learning abroad helps students develop strong independent living skills; and (3) foreign education systems and independent living experiences change ways of thinking and facilitate whole person development, which benefits students throughout their lives ("Toushi", 2001). These three opinions about international studies originate from many former Chinese international students' experiences, and are further corroborated by the learning experiences of newer generations of Chinese undergraduate international students ("Toushi", 2001). This phenomenon implies that Chinese students might pursue overseas education for a kind of meaningful learning that prompts academic and whole person development authentically, and they have found it. Also this phenomenon suggests that it might be not only foreign educational systems themselves but also the out-of-school learning and living experiences that made international learning more meaningful than Chinese education. This assertion is positively supported by my personal overseas study experience.

Personally, with positive expectations towards international study, I also came to Canada to pursue my learning in a meaningful way, where I can be motivated to learn, and my academic and personal growth can be facilitated. On the one hand, although I used to be a bright student with long-term academic success, I didn't have high confidence in my own learning ability, and often doubted whether I could learn authentically. Also, being a person with various interests, I always felt a need to find some ways to motivate myself to pursue a deeper learning in one particular area. On the other hand, I had also seen many Chinese students who are not motivated to learn. Even among "bright" students with histories of high academic achievement, it is not

uncommon to find some who are uninterested in what they learn. Thus, I wanted to know in what kind of situations students want to learn and also can learn well.

My personal experience in the University of Victoria was very positive. I enjoyed the learning and learned well. Also, my personal growth was facilitated by the learning and living experiences in Victoria. For example, my independent ability and self-confidence improved, and I was more open to different ideas. In other words, I found my learning meaningful in Canada. As I compared my learning experiences in my Chinese university when I was an undergraduate student there and in the University of Victoria, I realized that there are some factors that make my meaningful learning possible. For instance, I enjoyed my study a lot and also learned well because I was allowed to choose courses that I liked and where I was able to study what I was interested in. Also, teachers gave me quick responses and constructive support. Many of my teachers always praised me and encouraged me to express my own opinions. Moreover, the university library provided a spacious and quiet learning environment, and many university staff adjusted their help based on my personal situation and needs. I improved my independent ability and confidence by studying and living alone in a foreign country. I changed my attitudes by meeting different people and accessing different ideas inside and outside school – I started to understand the value of diversity and learned to respect and advocate it. My personal overseas study experience suggests that my meaningful learning might be related to the factors of autonomy, relevance, flexibility, caring support, and independent living experiences. This analysis gave me some clues that how to make my future learning meaningful. But, how to create other Chinese international students' meaningful learning is still not known. Are there any similar patterns between their perceptions of meaningful learning and mine? What other factors can make students' learning meaningful? Little research has been done in regard to Chinese international students' perceptions. How the Chinese international students who are studying in foreign institutions think about their learning is unknown. Do they think their overseas study is meaningful? What kinds of learning do they value? What constitutes their meaningful learning? If we can answer these questions, we will understand better Chinese students' learning needs. This understanding might give educators some clues in how to make Chinese and international post-secondary education more meaningful for Chinese

students, and provide me and other students with some references about how to make our learning meaningful.

A group of Chinese international undergraduate students, who are from Mainland China and have had post-secondary educational experience there, was selected as a target group for this study about students' perceptions of meaningful learning. This group of students was selected based on my research need, which is identified in the chapter of literature review, and two assumptions: (1) This group of students might have a stronger desire for a meaningful learning experience than any other group of Chinese international students, because they were willing to spend a great deal of money studying in a Canadian university even though they had already had opportunities to study in Chinese post-secondary institutions or had already obtained one post-secondary degree in China; (2) By having a commensurate level of learning experiences in China and in Canada, this group of students might be more aware of the kind of learning that makes sense to them than other groups of Chinese international students. Actually, an informal talk with a student in this group supported my ideas to some extent. This student believed learning in Canada was meaningful for him because he gained the possibility of becoming an "international man (guoji ren)"- he would be able to work in many countries in the world after his graduation. He also studied harder and better in Canada than he did in China. Moreover, he gave me thoughtful reflections on what motivated and facilitated his learning both in China and in Canada.

The research question in the current study is:

What constitutes meaningful learning for international undergraduate students at the University of Victoria who are from Mainland China and have had post-secondary educational experience there?

I used the term "meaningful learning" to represent the learning that is explored in this research. Meaningful learning refers to a kind of learning that can motivate and facilitate students' learning and is also valued by students. The goal of this research is to explore what factors can motivate and facilitate students' learning and make learning valuable in their perceptions, through their reflections on their learning experiences in China and in Canada. It is hoped that through this study major themes related to students'

perceptions of meaningful learning will be found. As such, strategies for providing meaningful learning in both education systems might be suggested.

CHAPTER 2 LITERATURE REVIEW

This chapter reviews the previous research in the area of student motivation and learning, and briefly in the area of student perceptions. Research gaps are identified which are addressed in the current study. This chapter provides a rationale for the current research.

Literature Review of Motivation and Learning

The purpose of this literature review was to understand the work that had already been done in previous research about motivation and learning, and find some common themes that can be related to meaningful learning. Because "meaningful learning" is just a term used in this current research, the literature review was actually guided by this question: What factors motivate and facilitate students' learning?[1] Five constructs: relevance, challenge, autonomy, hands-on experiences, and supportive community are suggested by the literature review as the answers to this question.

Relevance

Relevance refers to the connections among student, school, and society. To elaborate, that is, on the one hand, learning materials and activities should be connected to students' personal contexts, such as their prior knowledge, interests, goals, needs, beliefs, values and so on. On the other hand, they should be connected to the social reality – students need to see that they can use what they learn in the society and learn how to do it.

Relevance has been emphasized by many education and psychology theorists, including Bruner, Dewey, Gardner, and Rogers. Bruner (1971) defines relevance in a school context in two senses. One is social relevance, which means "what is taught should have some bearing on the grievous problems facing the world, the solutions of which may affect our survival as a species" (p. 114). Another is personal relevance, which means, "what is taught should be self-rewarding by some existential criterion of being 'real,' or 'exciting,' or 'meaningful'" (p. 114). In other words, learning should be relevant to students' personal lives and the current world. Bruner believes education

should be intentional. Students need to know why they need to learn and learn with purpose. Bruner proposes a pedagogy that emphasizes the link between skill and intentionality by highlighting the two senses of relevance. In this pedagogy, he suggests students practice skills through solving problems that have significant meaning for either society or the individual student.

Dewey (1938) emphasizes the relevance of new experience and prior experience. Dewey says, "Wholly independent of desire or intent, every experience lives on in further experiences" (p. 27). When one's experiences are so disconnected from one another that they are not linked cumulatively to one another, Dewey believes one's growth will hardly flourish, as one's energy is dissipated. Thus, Dewey urges educators to pay attention to continuity of experience – teachers should value students' prior experience and help them make "organic connection between educational and personal experience" (p.25).

Rogers (1969) contends that to motivate students to take initiative in their learning, educators should give students real problems that have meaning and relevance for them. He writes,

> If self-initiated learning is to occur, it seems essential that the individual be in contact with, be faced by, a problem which he perceives as a real problem for him. Success in facilitating such learning often seems directly related to this factor.... it is necessary that the student, of whatever level, be confronted by issues which have meaning and relevance for him.... if we desire to have students learn to be free and responsible individuals, then we must be willing for them to confront life, to face problems. (p.130)

Gardner (1991) emphasizes the relevance between students' former and/or existing learning styles with new ways of learning in school. To make more students attain a significant degree of understanding across a wide range of subjects, he states,

> The key, I believe, is to devise learning environments in which students naturally come to draw upon their earlier ways of knowing and to configure those environments so that students can integrate these earlier forms of knowing with the formats of knowing that are necessarily and appropriately featured in school. (p.180)

Clearly, Gardner urges educators to take advantage of students' former and/or existing learning styles, and set up an appropriate environment to encourage students to use their learning styles directly or with new learning styles together.

Relevance is needed for humans to understand things. By knowing the relevance between new knowledge and our prior knowledge, we build a context for it so that the new knowledge's meaning can be understood. Bateson (1979/2002) says that there is no meaning without context. Without relevance, we don't have clues, references or contexts to make sense. Ausubel (1968) found that effective learning happens when connections between new knowledge and old knowledge are formed. Ausubel declares, "If I had to reduce all of educational psychology to just one principle, I would say this: The most important single factor influencing learning is what the learner already knows. Ascertain this and teach him accordingly" (p. vi).

The relevance between learning and individual context benefits students' motivation. An expectancy-value model of motivation developed and researched by Eccles, Wigfield, and their colleagues suggests that the subjective task values, including attainment value or importance, intrinsic value, utility value or usefulness, and cost, directly influence student choices and effort of achievement tasks (Wigfield & Eccles, 2000). Attainment value is defined as the subjective importance of doing well on a given task (Wigfield & Eccles, 2000). Importance is determined by how well a task fulfills the individual's needs and how relevant a task is to an individual's self-concept (Stipek, 1997). Intrinsic value is defined as the enjoyment one gains from doing a task (Wigfield & Eccles, 2000). Usefulness refers to "how well a task fits into an individual's future plans" (Wigfield & Eccles, 2000, p.72). So, the more relevant a learning task is to a student's concerns (e.g., it can fulfill the student's needs and goals, match his or her interests, fit his or her values or beliefs), the higher attainment value, intrinsic value, and utility value the task has – consequently, the higher student motivation for the learning task. Similarly, the relevance between learning and social reality can also inform students of the usefulness and importance of learning, thus it can enhance student motivation.

In summary, relevance between school, student, and society makes the meaning of learning visible and the purpose of learning understandable for students. It enables students to connect their personal experiences with school experiences, and make

learning personally useful or important. Thus students' learning can be intentional and be motivated. Relevance also builds contexts of meaning therefore facilitating students' learning.

Challenge

Challenge in a school context refers to learning contents, activities, and tasks that are moderately difficult and ones that students can complete only with a reasonable amount of effort. Challenge can be understood as the tasks within students' zone of proximal development (ZPD), which refers to

> the distance between the actual development level as determined by independent problem solving and the level of potential development as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky, 1978, p. 86)

In other words, challenging tasks are slightly beyond an individual student's present ability level, but through the student's persistent effort and with teachers' or peers' help, the tasks can be accomplished successfully.

Challenge is essential to motivation (Clifford, 1990; Pintrich & Schunk, 2002; Stipek, 1997). Pittman, Boggiano, and Ruble (1983) suggest that challenge is one of the major features of an intrinsic orientation and is needed to foster intrinsic motivation. Deci and Flaste (1995) contend that challenge is a natural human need as people need it to feel competent. Zimmerman (2000) posits that students have higher self-efficacy to moderately difficult tasks than to the very difficult ones and the very easy ones. As self-efficacy is positively related to motivation and learning (Zimmerman, 2000), students have higher motivation and performance when they are given challenging tasks instead of the very easy or the very difficult ones. Clifford (1990) believes challenge improves one's self-efficacy. He argues that only success at moderately difficult tasks, which have moderate success possibility, gives rise to feelings of pride, competence, and personal control. All these feelings contribute to an enhanced self-efficacy. Stipek (1997) states that moderately difficult tasks generate optimal arousal and interest in students, which directly benefit the learning process and student engagement, and help students to build

or improve their feelings of competence, which contribute to students' interest and motivation in return. Clearly, challenge improves students' motivation and learning by enhancing their self-efficacy and engagement.

Different from challenge, tasks that are very easy or very difficult not only demotivate students but also can distort students' future growth. Easy tasks make students feel bored. Stipek (1997) argues, "tasks that are completed without much effort are not intrinsically interesting" (p. 89). Feldhusen and Kroll's (1991) research indicates that both gifted and non-gifted students perceived their school as being boring because of lack of challenge. Also, easy tasks prevent students from experiencing difficulties and failures, thus making students vulnerable. When these vulnerable students encounter real difficulties later, self-doubt and impairment may happen and helplessness may develop (Dweck, 2000). On the other hand, tasks that are very difficult demotivate students also. Expectancy-value theory shows that the achievement value includes a cost component and it "refers to how the decision to engage in one activity (e.g., doing schoolwork) limits access to other activities (e.g., calling friends), assessments of how much effort will be taken to accomplish the activity, and its emotional cost" (Wigfield & Eccles, 2000, p. 72). For the difficult tasks, the cost is so high that their value might become low for students. This decreases students' motivation to engage in these tasks. Also, very difficult tasks make success unachievable even when students put in a lot of effort to do them. Since prior accomplishment is one of the antecedents of self-efficacy (Graham, 1991), failures make students' self-efficacy suffer. Gradually, helplessness may be learned "when students do not see a connection between their actions and their performance and grades" (Alderman, 1999, p. 39). So, very difficult learning tasks cannot benefit students' motivation and future growth.

Many educational theorists believe that challenge is needed for cognitive development. Challenge causes problems, conflicts, confusion, obstacles, mistakes, and difficulties. All of these are the characters of the stage of disequilibrium (Doll, 1993). Disequilibrium plays "a triggering role" (Piaget, 1975/1985, p. 11) in cognitive development. Piaget believes the development of a cognitive system follows a model of equilibrium-disequilibrium-reequilibration. That is, for one's cognitive development to happen one's existing cognitive structure needs to be challenged fundamentally thus one

enters a stage of disequilibrium. Then in trying to overcome disequilibrium in order to reequlibrate, one can achieve a higher level of cognitive development. Piaget holds that reequilibration is the source of progress of knowledge, while disequilibrium provides an essential motivational factor in progress. Disequilibrium brings one a need to reequilibrate – it motives one to try out, to go beyond the current state of knowledge and construct a new form of understanding (Piaget, 1975/1985). Without disequilibrium, reequilibration would not occur and one's cognitive system would not change (Piaget, 1975/1985). In other words, no cognitive development is possible without disequilibrium. Hence, challenge plays an important role in cognitive development because it triggers disequilibrium to occur.

Doll (1993) also believes that disequilibrium is the driving force of cognitive development. He advocates that teachers challenge students by giving them "real problems", which cause disequilibrium that is "deeply felt or 'far-reaching'" (p. 83). Also, he writes, "The teacher's art, along with helping disequilibrium occur, is that of constraining this disequilibrium – of not letting it turn into unbridled disruption" (p. 83). Clearly, Doll's words suggest that teachers need to give students tasks that are moderately difficult.

Dewey (1913) holds that meeting obstacles not only can arouse one's energy to surmount the difficulties, but also it brings the end and purpose of one's action to consciousness, thus one becomes more intentional and reflective in one's course of action. Learning can benefit from increased effort and consciousness.

Challenge also brings difference between students' prior knowledge and present information. For Bateson (1979/2002), it is difference that triggers the human mind to operate. Bateson says, "The interaction between parts of mind is triggered by difference" (p. 89). Difference is either a difference between two things or a change between a thing in time one and the same thing in time two (Bateson, 1979/2002). Bateson also points out that not all the difference is effective for one's mental process. Only the differences that can cause one to perceive and also accept are effective. The difference brought by an easy task is so small that students cannot perceive it; the difference brought by a difficult task is so big that one rejects it. So, only appropriate difference, brought by truly challenging tasks, triggers students to think and brings possibility for their cognitive development.

For Vygotsky (1978), internal development process only operates when the students work in the zone of proximal development through interactions with their environment and other people, when the distance between existing developmental level and the potential development level appears. That is, cognitive development only happens when there is an appropriate gap between students' existing cognitive level and the level that students are going to reach. So, learning should challenge students (Vygotsky, 1978). Vygotsky argues that school should make every effort to push students to the level of potential development instead of the development level that has already been reached.

In summary, challenge optimizes motivation and maximizes learning by increasing students' engagement and self-efficacy, and urging students to learn purposefully. Also, challenge triggers students to think, to change their cognitive structures and move beyond their existing developmental level, thus benefitting students' cognitive development.

Autonomy

Autonomy refers to students' self-government of their own study under certain control and guide from teachers. Autonomy or self-control is a native need of human beings (Deci & Flaste, 1995). Lens (1994) says: "Human beings want to control their environment and the outcomes of their actions. They want to be at the origin of what happens to them" (p. 3940). Self-control in school contexts is highly advocated by constructivism and post-modernism: learning is to construct knowledge, not receive it; students are not passive acceptors in school – they should have control in their own learning (Doll, 1993; Marlowe & Page, 1998; Richardson, 1997).

Research on motivation shows that self-control is positively related to intrinsic motivation. Stipek (1997) argues: "Students' perceptions of personal causality – their sense that they chose to engage in an activity – and thus their intrinsic motivation are affected by how much control they have over their learning activities" (p. 99). Swann and Pittman's (1977) research shows that increasing even just the "illusion of control" stimulates or enhances students' intrinsic motivation. In their study, students' choices of activities were actually implicitly controlled by teachers' suggestions and students were not aware of it. This phenomenon suggests that students have the tendency to seek the

perception of self-control and self-initiation. On the other hand, lack of control or choice demotivates students (Lepper & Hodell, 1989; Stipek, 1997). Also, lack of control may cause learned helplessness, which is often accompanied by passivity, loss of motivation, performance deterioration (Graham & Weiner, 1997). Deci (1975) point out that it is the controlling components of teacher comments or verbal rewards perceived by students that decreases student intrinsic motivation.

When autonomy is supported, students have choices in their learning. Deci and Flaste (1995) say: "One of the central features of being autonomy supportive is providing choice" (p. 144). Choice is crucial to increase student motivation and achievement as meaningful choice improves willingness and volition (Deci & Flaste, 1995). Deci and Flaste write:

> The main thing about meaningful choice is that it engenders willingness. It encourages people to fully endorse what they are doing; it pulls them into the activity and allows them to feel a greater sense of volition; it decreases their alienation. When you provide people choice, it leaves them feeling as if you are responsive to them as individuals. And providing choice may very well lead to better, or more workable, solutions than the ones you would have imposed. (p. 34)

It's clear that autonomy enhances students' sense of responsibility and increases students' involvement and engagement of their learning. Therefore, it contributes to higher learning efficiency. Bruner (1971) urges educators to share the process of education with the learner and give students choices to make individual students' learning intentional. Bruner says,

> ... learning *is* individual, no matter how many pupils there are per teacher. I am only urging that in the organization of curricula, units, and lessons, there be option provided as to how a student sets his goal for learning. (p.116)

By having choices in learning, learning becomes relevant to students' personal interests, needs, and situations, thus it is more meaningful and appropriate for each individual student.

Moreover, when people are autonomic, the control of their behaviour is internal. Wang (1983) did a literature review in theories and research on locus of control and concluded that the "internal locus of control tends to be associated with positive attitudes

toward mastery and competence behaviour in both children and adults" (p. 214). The individuals who believe they can control their destinies are likely to use their previously learned skills to acquire new ones, actively try to change their environment, resist group pressure, and make realistic intermediate-probability bets in situation involving risk (Wang, 1983). In school situations, the internal locus of control is positively related to students' exploratory behavior, excitement about learning, classroom participation, the tendencies of seeking information in problem-solving, the persistence in dealing with difficult tasks, and academic performance (Wang, 1983). Through his literature review, Wang also found a relationship between changes in student perceptions of locus of control and improvement in school performance. This relationship is further supported by Wang's instructional intervention program, which was designed with an implicit goal of fostering the development of student sense of personal control through school learning experiences. The result of the program suggests that, "as students gain increasing capability to exert control over their school learning, student task performance increases" (Wang, 1983, p. 243).

However, autonomy needs to be supported by the right amount of control and guidance from teachers. Deci and Flaste (1995) believe a truly autonomous person is the one who can take responsibility of her or his decisions and choices, and he points out, "Limit setting is extremely important for promoting responsibility" (p. 43). In a cross-cultural study on autonomy and perceived control in learning, Hsiao (2002) finds that although perceived control has positive influence on both Chinese and Canadian students' academic outcome, only cultivating a high level of autonomy in students and discouraging them to yield to any external plodding such as rules and expectations can actually have a significant negative impact on students' achievement. Ames (1992) argues that while giving students chances to self-manage their study, teachers should provide support for self-management strategies; otherwise, self-determination may not be enhanced. Students will not learn how to control themselves until they try with support from teachers.

In summary, autonomy is a human's natural need. It is essential for students' motivation. Autonomy also contributes to students' learning by increasing students' sense of responsibility and internal control, improving involvement and engagement, and

making students' learning intentional. But autonomy can benefit students' motivation and learning only when students are given choices as well as suitable control and support.

Hands-on Experiences

Hands-on experiences refer to the experiences in which students need to apply their knowledge to solve some real-life problems and/or produce some products. In other words, hands-on experiences are learning by doing. Problem-solving projects, labs, and Co-op are some examples of hands-on activities.

Having students "learn by doing" has been advocated by many educational theorists. Whitehead (1932/1950) believes that knowledge, without being utilized, tested or thrown into fresh combination, is inert. For Whitehead, it is the practical integrated with the theoretical that truly makes knowledge one's own and keeps it alive. In other words, authentic learning requires students to bring their knowledge back to the doing. When students are doing hands-on activities, they encounter a lot of spontaneous situations. To deal with them, they need to creatively employ their knowledge and some instant information in those situations. In this way, the knowledge is alive, and students develop higher level of thinking abilities, such as analyzing, generalizing, and abstracting, instead of remembering and recalling.

Bruner (1971) defines three modes of knowing – by action, by image, and by symbol. He posits that human beings represent and also understand the world through actions, icons, and symbols. One can understand things by doing them, or through imagination elicited by seeing icons, or through interpretation of symbols. Bruner believes students' learning can be facilitated when they can use these three means to learn:

> How [to] convert knowledge into the form that is within the grasp of a learner, so that he may be tempted on? Recall the three modes of knowing, characteristic of human cognitive operations – by action, by image, and by symbol. One approach to the task that has proved moderately successful is to begin a sequence of learning with an enactive representation.... One goes beyond that to intuitive, image-laden forms...and finally to the increasingly abstract symbolic modes of a field of learning. (p. 18)

Obviously, for Bruner, learning by doing is a very important and effective way to help students understand, especially at the starting stage of a sequence of learning.

A famous Chinese education theorist, Tao Xingzhi (T'ao Hsing-chih), also suggested in the 1920s: "life is education", which was a transformation of Dewey's "education is life", based on Chinese social conditions (Keenan, 1977). He called for "the union of doing, learning, and teaching" and suggested that students learn from doing and teaching (Keenan, 1977; "Tao xing zhi", 2003).

Having students to learn through hands-on experiences can also find strong support from social constructivism. Social constructivists believe that knowledge is not imposed from teachers to students (Richardson, 1997). Students actively construct their own understanding based upon the interaction between what they know and what they encounter, and they learn through active interaction with their environment (Richardson, 1997). Based on this educational view, hands-on activities should be prompted in order to facilitate students' learning. The reason is that hands-on activities require students to use their knowledge to deal with new information and solve problems that are related to students' social reality. In this way, hands-on activities prompt the interactions between students' formal knowledge and new information, and between students and their environment, thus benefitting students' learning.

The positive influence of hands-on experiences in students' cognitive development can also find support from Bateson's (1972/1981) work. Bateson believes that there are three levels of learning in humans. At Learning I level, one learns to respond or solve a specific problem. Students can reach this level of learning by rote memory. At Learning II level, one learns to solve a class of problems in various contexts or situations. Berman (1981) interprets, at this level, "the subject discovers the nature of the context itself, that is he not only solves the problems that confront him, but becomes more skilled in solving problems in general" (p. 216). In other words, at the level of Learning II, one learns to transfer one's knowledge within different contexts. The Learning III level is a stage full of creativity. At this level, "it is not a matter of one paradigm versus another, but an understanding of the nature of paradigm itself. Such changes involve a profound reorganization of personality – a change in form, not just content" (Berman, 1981, p. 217). In other words, students at the Learning III level do not

focus on the difference between different contexts, but see the similar patterns and relationships among different contexts. Thus students are not limited to one school of thinking but can move beyond it and create something new. Clearly, hands-on activities can help students move beyond Learning I and approach Learning II, as hands-on activities require them to apply school knowledge in various contexts that are different from that in which the knowledge is acquired at first. Although Learning III is difficult to be reached by hands-on activities alone, hands-on activities still contribute to students' cognitive development by providing them opportunities to develop from a low level of learning to a higher one.

Hands-on experiences prompt cognitive development also because they bring students feedback of their learning. Feedback is essential for human cognitive development. Doll (1993) argues that feedback plays a significant role in a transformative curriculum.[2] Feedback provides us sources for reflection, in which we re-think about what we have done or what we have thought about before. This recursion of thought, the looping of thoughts on thoughts, Doll believes, distinguishes consciousness and enables humans to understand who and what we are, make meaning, and also transform mentally. Without feedback, reflection is deficient; without reflection no understanding and depth of thought can be developed, therefore cognitive growth is impossible. By doing hands-on activities, students test their knowledge and see the results of it. These results act as feedback for students' learning, thus facilitating students' cognitive development.

Hands-on experiences not only facilitate learning but also improve motivation. Hands-on activities ask students to solve real-life problems, thus they help students build connections between their schooling content with their life experience and concrete social reality. Students can see how knowledge can be used in their lives or in the society. Learning becomes visibly useful and relevant to students' lives. As discussed before (in the subsection on "Relevance"), the more students perceive that their learning is useful or relevant to them, the higher their motivation will be. Moreover, hands-on programs bring students concrete and specific goals. Locke and Latham (1984) argue that specific goals motivate individuals better than vague or general ones. The positive benefits of hands-on experience in student motivation and learning have been shown in Tassinari's (1996) history instruction. Tassinari employed a project-based approach instead of lecture and

work-sheet method in his history classes. He had students write history plays, simulate different countries in particular periods, present travelling adventures, imitate newscasts and so on. Tassinari's students were highly motivated and they also took more responsibility for their learning, thus they learned more efficiently.

In summary, hands-on experiences increase students' motivation by making learning relevant and useful for students, and giving students' specific goals for their study. Hands-on experiences help students understand, develop high-level thinking abilities, and make knowledge their own, therefore benefitting students' learning.

Supportive Community

Supportive community refers to a kind of environment in which students receive caring, respectful and constructive support from teachers, peers, and other people in the community.

A supportive community is strongly advocated by Doll (2002). For Doll, community contains care and critique, and its key function in a transformative curriculum is to facilitate interaction and reflection. Doll writes,

> Community, with its emphasis on both care and critique – an emphasis that requires a high degree of trust – is what helps elevate us above ourselves.... Experience is not a private affair, even though we too often consider it as such: *experience needs to be reconstructed* or transformed via public interaction which occurs in a community dedicated to both care and critique.... Community, in its dual but integrated function of helping us both develop and be critical of our basic assumptions, is the vehicle through which this transformation occurs. (p. 50-51)

Doll believes that a transformative experience includes "hands-on" doings, reflections, and the interactions between these two. In a supportive community with caring and conductive critiques, one's doing-reflecting-doing loop can be established and kept going. Thus one's experience can be transformative.

Student motivation and learning are affected by the school environment. Positive social relationships generated from a supportive school environment contribute to positive attitudes towards school and schooling (Wentzel, 1999). This liking of school and schooling can increase students' willingness to participate and get involved in school

activities. According to Astin's (1985) involvement theory, with the improvement of student involvement, student achievement can be enhanced. Astin's involvement theory says that, "the amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program" (p. 36). Astin believes that student involvement is the cornerstone of student achievement. Also, a supportive school environment facilitates the internalization of external goals. Wentzel (1999) argues that, "students who perceive their classroom as socially supportive environments are likely to pursue those goals that are valued in that context" (p. 80). Once the external goals become internal goals for students, students' motivation and learning will be enhanced; as Lens (1994) says, "Children are intrinsically motivated when learning and performing at school are goals in themselves" (p. 3938). Moreover, a positive environment can influence some constructs of motivation, such as students' goal orientation (Ames, 1992) and locus of control (Deci & Flaste, 1995). Ames (1992) finds that a supportive school environment contributes to a mastery goal orientation in students. Hence, deep learning can be facilitated. According to Deci and Flaste (1995), when teachers respect students' perspectives and work from there, student autonomy is supported. Thus students believe they have control in their learning – the locus of control is internal rather than external.

Teachers play a significant role in a school community. A number of researchers (e.g., Kearney et al., 1991; Kim, Damewood & Hodge, 2000; Gorham & Millette, 1997; Powell-Mikle, 2003; Schrodt, 2003; Teven & McCroskey, 1996; Thweatt & McCroskey, 1998) have shown that teachers have direct influence on student motivation and learning. Firstly, teachers' influence on students is related to teachers' power in the classroom, which is referred to "an individual's *potential* to have an effect on another person's or group of persons' behavior" (McCroskey & Richmond, 1983, p.176). According to McCroskey and Richmond (1983), teachers' power in the instructional context has five bases: coercive, reward, legitimate, referent, and expert. Coercive power is based on a student's expectations that he or she will be punished if he or she does not conform to the teacher's influence attempt. Reward power is based on a student's perception of the degree to which the teacher will reward her or him for compliance. Legitimate power, or "assigned power", is based on a student's perception that the teacher has the right to

make certain demands as his or her position is "teacher". Referent power is based on a student's identification with the teacher and it refers to the strength of the student-teacher relationship. Expert power is based on a student's perception of how knowledgeable and competent the teacher is. Both coercive and legitimate power retard cognitive and affective learning, while referent and expert power enhance cognitive and affective learning[3] (Richmond & McCroskey, 1984). Since both referent and expert power "rest on a foundation of a good relationship between the student and teacher" (Richmond & McCroskey, 1984, p. 136), a positive relationship between students and teachers can increase teachers' referent and/or expert power, thus benefitting student motivation and learning. This also has been supported in Richmond's (1990) study. In Richmond's examination of the effect of teacher immediacy and teacher use of affinity-seeking techniques in teacher power and student motivation, she found that affinity seeking was positively related to student motivation, cognitive learning, and affective learning. She says,

> It is clear that the development of positive relationships between student and teacher is crucial. When such relationships are built, the availability of referent and expert power are much greater, thus opening many more communication options to the teacher for maintaining mundane control. (p. 194)

Secondly, teachers' influence on students is related to teachers' credibility. Source credibility is defined as "an attitude of a receiver that references the degree to which a source is seen to be believable" (McCroskey, 1992, p. 101). In an educational context, teachers who are seen as believable have credibility. Instructional researchers agree that teacher credibility has positive influence in student affective learning and cognitive learning – "teachers who are perceived to be more credible will produce more positive affect toward themselves and/or the content of the class and.... higher student learning" (Thweatt & McCroskey, 1998, p. 349). The construct of credibility has three dimensions: competence, trustworthiness, and caring (McCroskey, 1992). Competence is the degree to which one is perceived to know what he or she is talking about; trustworthiness refers to the degree to which one is trusted by another; caring is the degree to which one is perceived to care about who he or she is talking to (McCroskey, 1992). Teachers who show a more caring attitude towards students have higher credibility (Teven &

McCroskey, 1996). Similarly, Thweatt and McCroskey (1998) find teachers who engage in immediate behaviors, which communicate a positive attitude to the students and enhance closeness with them, produce greater student perceptions of caring, thus increasing teachers' credibility. Kim, Damewood, and Hodge (2000) also posit that teachers' positive attitudes, such as qualities of leadership, nonauthoritarianism, supportiveness, and enthusiasm for the class and the subject matter, promote a caring atmosphere, which stimulates student participation, facilitating the learning process.

In summary, a supportive community benefits students' motivation and learning by increasing students' willingness to get involved in school activities, changing students' perceived control and goal orientation, and facilitating reflective thinking. Teachers play a key role in the construction of a supportive community. Teachers' caring attitudes strengthen student-teacher relationships and enhance teachers' influence on students, thus improving students' motivation and learning.

To conclude, the literature review of motivation and learning suggests that five constructs (Relevance, Challenge, Autonomy, Hands-on Experiences, Supportive Community) contribute to meaningful learning. These constructs indicate that in order for learning to be meaningful it must be purposeful, productive, and individualized. It also needs support from a positive social context. Moreover, in meaningful learning, the usefulness, importance, and progress of learning are visible. Some of the five constructs of meaningful learning are echoed in Roger's (1969) definition of meaningful learning in the following:

> *It has a quality of personal involvement* – the whole person in both his feeling and cognitive aspects being *in* the learning event. *It is self-initiated.* Even when the impetus or stimulus comes from the outside, the sense of discovery, of reaching out, of grasping and comprehending, comes from within. *It is pervasive.* It makes a difference in the behavior, the attitudes, perhaps even the personality of the learner. *It is evaluated by the learner.* He knows whether it is meeting his need, whether it leads toward what he *wants* to know, whether it illuminates the dark area of ignorance he is experiencing. The locus of evaluation, we might say, resides definitely in the learner. *Its essence is meaning.* When such learning takes

> place, the element of meaning to the learner is built into the whole experience. (p. 5)

The five constructs of meaningful learning and Roger's definition of meaningful learning indicate clearly that a critical feature of meaningful learning is individual. This suggests that whether a learning experience is meaningful or not is judged from students' perceptions instead of teachers'.

Literature Review of Student Perceptions

The purpose of the literature review in this section is threefold: to determine why we need to listen to student perceptions, what studies about student perceptions of motivation and learning in the past have told us, and what research about Chinese international undergraduate students' perceptions have been done before.

What are perceptions? Perceptions are thoughts, beliefs, and feelings about persons, situations, and events (Schunk & Meece, 1992). Contemporary cognitive theories of learning, motivation, and instruction view perceptions "as factors that are influenced by personal attributes and situational cues and that affect one's own behaviors and the perceptions and actions of others in the environment" (Schunk & Meece, 1992, p. xi). Obviously, student perceptions are the results of interactions between student internal factors and external situations, and in return they affect both the student and the environment (including other people in the environment).

Why do we need to listen to student perceptions? There are two reasons. First, student perceptions are very important. In their book *Student Perceptions in the Classroom*, Schunk and Meece (1992) argue that student perceptions help to explain achievement-related outcomes beyond the students' intrinsic abilities and external environmental factors, such as rewards, instructional materials, and so on. Many constructs related to motivation and learning are influenced by student perceptions. For example, Deci and Flaste (1995) point out,

> When it comes to competence and autonomy, it's really the person's own perceptions that matter. To be intrinsically motivated people need to *perceive themselves* as competent and autonomous; they need to feel that they are effective and self-determining. Someone else's opinion does not do the trick. (p. 86)

Similarly, regarding the dimension of teachers' credibility – caring, McCroskey (1992) holds: "It is not the caring that is critical, it is the *perceived* caring"(p.112). Therefore, it is important that teachers exhibit behaviors consistent with caring, otherwise, if teachers care about students but they don't communicate or demonstrate that caring, they might be perceived by students that they don't care at all (McCroskey, 1992).

Many scholars advocate listening to students' perceptions (e.g., Ares & Gorrell, 2002; Gardner, 1991; Deci & Flaste, 1995; Phelan, Davidson & Cao, 1992). For instance, Gardner (1991) says,

> Education that takes seriously the ideas and intuitions of the young child is far more likely to achieve success than education that ignores these views, either considering them to be unimportant or assuming that they will disappear on their own. The ideas of the young child – the youthful theorist – are powerful and are likely to remain alive throughout life. Only if these ideas are taken seriously, engaged, and eventually trimmed or transformed so that more developed and comprehensive conceptions can come to the fore – only then does an education for understanding become possible. (p. 248)

Second, student perceptions are always different from teachers', but teachers might not be aware of the difference. For example, Gorham and Millette (1997) find a sharp division between motivation as a personally-owned state and demotivation as a teacher-owned problem reported by students, and this division was not apparent across the teachers' perceptions. Nira (2000) finds gaps between faculty and student perceptions concerning all aspects of the academic environment: while faculty emphasized theory, students wished to have a more practical orientation; while faculty viewed themselves as satisfactory teachers, students highly criticized faculty's teaching. Fritschner (2000) finds that the meaning of student participation was different between faculty and undergraduate students. Therefore, listening to student perceptions can guide us to work on the issues that really matter to students' motivation and learning. Based on the above two reasons, it is worth doing research on student perceptions.

The past research about students' perceptions has given us some insight about what factors contribute to the meaningful learning that is valued by students, and can motivate and facilitate their learning. Some of the five constructs revealed from the

literature review of motivation and learning theories find support from the experimental research of students' perceptions. For example, in Paula and Ralph's (2000) study of international students' learning styles, they found students desired to identify and pursue goals related to their immediate and specific interests. This suggests the importance of relevance in education. Kearney, Plax, Hays, and Ivey (1991) examined students' perceptions of college teachers' misbehaviors, which are defined as "those teacher behaviors that interfere with instruction and thus, learning" (p. 310). They found "when teachers 'underwhelm' student with information by making their classes and tests too easy, students perceive them as misbehaved teachers" (p. 323). This result, interpreted by Schrodt (2003), suggests, "students enter the college classroom with a certain expectation that effective instruction involves the process of being challenged by the instructor." (p. 108). Rajapaksa and Dundes's (2002) study about student perceptions confirmed the importance of social network in the adjustment of international students. This suggests that a supportive community is critical for student learning. Teven and McCroskey's (1996) study revealed that student perception of caring on the part of their teachers was substantially associated with the students' evaluation of their teachers, their affective learning, and their perceptions of their cognitive learning. In Kearney et al.'s study about college students' perceptions of teachers, they found that teachers' professional competence, such as a solid knowledge of the subject matter and a high level of professionalism, was associated with their effectiveness perceived by students. Clearly, in students' perceptions, teachers have significant influence in their motivation and learning.

Why do we need to listen to Chinese international undergraduate students in Canada? The reason is twofold. Firstly, this group of students' perceptions have rarely been explored before. There is little research about Chinese students' perceptions on their own learning experiences. Also, very few studies about Chinese learners are interested in Chinese international undergraduate students who study in Canada – most literature about Chinese international students target Chinese international graduate students in America. Secondly, this group of students, as a new generation of Chinese, is quite different from the old generations. Earlier studies indicated that Chinese international students had financial problems (Feng, 1991). Many of them didn't plan to go back to China after their graduation, as a well-paid job was not available in China at that time. However, because

of China's one-child policy and its booming economic development, a lot of Chinese international students are now financially secure, especially those who are pursuing undergraduate degrees. Many of them also plan to go back to China to work after their graduation so that they can earn high income and take care of their parents as well. These newer students are different from the older generations of Chinese, but limited research about this group of students has been conducted. So new research is in order.

Based on the research gap and the important role of student perceptions in education identified above, the current study of Chinese international undergraduate students' perceptions has a significant meaning. It is conducted to fill a gap in educational research, and to broaden our understanding of the components of meaningful learning by exploring the perceptions of Chinese international undergraduate students who have had post-secondary educational experience in both Mainland China and Canada. The five constructs that are summarized based on the literature review of motivation and learning are the theoretical basis for this study. They are used to explain and understand the research findings of this study.

CHAPTER 3 METHODOLOGY

This research investigates the subjective conceptions of meaningful learning for a group of international students. A qualitative research methodology is suitable for this research because "the empirically well-founded formulation of such subject- and situation-related statements is a goal which can be attained with qualitative research" (Flick, 2002, p. 4). A case study was selected as the research approach of the proposed study. Case study approaches are used to understand an individual, a group, or phenomenon, to explain why things happen as they do and to generalize or predict from a single example (Sturman, 1994). Case study researchers believe that "human systems develop a characteristic wholeness or integrity and are not simply a loose collection of traits" (Sturman, 1994, p. 640). Thus, "to understand a case...requires an in-depth investigation of the interdependencies of parts and of the patterns that emerge" (Sturman, 1994, p. 640). In other words, case study researchers focus on the relationships of parts in a case instead of any single part. In this study, the students' perceptions about meaningful learning cannot be understood without exploring the interdependent relationships between students' perceptions and other contexts, such as the students' cultural background, educational experiences, and their purposes of learning abroad. As such, a case study approach is appropriate for this study. Limited by the time of research, this study mainly focuses on the influence of students' former post-secondary educational experience and cultural background in their meaningful learning, the effect of students' development stage related to age and gender and historical and cultural contexts related to their home cities on students' meaningful learning are not explored.

Participants were selected by purposeful sampling. Data triangulation and methodological triangulation were used to get "an interpretation of the phenomenon at hand that illuminates and reveals the subject matter in a thickly contextualized manner" (Denzin, 1994, p. 6462). Research data was gathered from multiple informants (students and student services staff) through different methods, which include surveys, individual interviews, document review, and focus group interviews. Data collection started in November 2003 and ended in February 2004.

Holistic analysis in which "the researcher examines the entire case (Yin, 1989) and presents description of themes, and interpretations or assertions related to the whole case" (Creswell, 1998, p. 250) was used to analyze the data. In this type of data analysis, any new data is added to the existing data, forming a new data set, which is examined by the researcher as a whole. This type of analysis of data was selected because it encourages the researcher to look for the relationships among different parts of the case and see the whole picture, instead of breaking the data into parts and examining them separately. To ensure research quality, Guba and Lincoln's (1989) criteria for qualitative research were adopted. Research bias was recorded at the beginning of the research and progressive subjectivity was recorded in a research diary, which was checked back and forth frequently during the whole process of the study. Also, prolonged engagement, peer debriefing, member check, and negative case analysis were used to improve credibility of research. A careful description of research process and results were presented in the thesis, as completely as possible, for a better dependability and transferability of the findings of the current study.

Research Site

The selection of the research site was based on the preliminary research. The data from the registry office of the University of Victoria shows that in the academic year of 2002-2003, there were 244 Chinese students who were from Mainland China, and 179 of these were undergraduate students. Since the University of Victoria has a higher number of Chinese undergraduate students than Chinese graduate students, it may provide more services to Chinese undergraduates than other Canadian universities who have lower numbers of Chinese undergraduate students than Chinese graduate students. Therefore to do a research at the University of Victoria is appropriate and easily facilitated by the researcher.

Participants

In order to gain an in-depth understanding of students' perceptions and experiences, participants in this research include Chinese students and student services staff. The criteria and the recruit process of the participants are presented as follow.

Chinese Students

There were four criteria for participation in this research. Participants must be (1) international undergraduate students, (2) from Mainland China (not including Hong Kong), (3) have former post-secondary education experience in Mainland China, (4) and have studied in Canada for at least one term. In total, ten students who fulfill these four criteria participated in this research.

I employed six ways to recruit participants after I posted the invitation letters (Chinese and English versions) on my personal website. First, being a registered user of the e-mail list service of the Chinese Student Union, I sent out long and short invitation letters to all users on the list. Second, I printed many short invitation notes in English and Chinese, and posted them around campus. Third, I asked the student coordinator of the Faculty of Engineering and the secretary of the Faculty of Business to help me send my invitation note (English version) to their students by e-mail. These faculties were selected based on the advice of the secretary at the Faculty of Engineering. She said Chinese undergraduate students mainly study in these two faculties. This information was supported by an active member of the Chinese Student Union and some undergraduate Chinese students. Fourth, I asked some students organizations, such as Computer Science Course Union and AIESEC[4] to forward my invitation note (English version) to the students on their registered lists. Fifth, I asked for help from the Chinese Undergraduate Student Association. They allowed me to introduce my research and distribute my invitation notes to the audience during a Chinese movie night. Sixth, I asked the student participants and every Chinese student I knew to introduce qualified individuals to me.

It was a very difficult process to recruit participants. It took me more than two months to recruit 10 participants. Out of the above six approaches for recruiting participants, I found eight students through the last two approaches. Only one student (Fang) initiated our contact after she saw my posting on campus and also heard about my research through AIESEC, expressing her willingness to participate in my research. The last participant (Ding), who happened to be my roommate since January 2004, joined my research after my invitation. Additionally, it was unlikely that I could obtain the first contact with potential participants through e-mail. Only one student, who was introduced by one of my participants, replied to my invitation by e-mail. Telephone worked very

well as a tool for first contact. As long as I could talk with the potential students by phone, there was no difficulty in persuading them to join my research – they all agreed to participate quickly after my short introduction of the research.

Because of the limited time and the difficulty of recruitment, I could not follow my proposed plan – to recruit more than 10 qualified students at first and then pick up 10 participants later in order to achieve maximum variation (Patton, 1990). I had to recruit students whoever were qualified and volunteered to participate in my research.

Student Services Staff

Five staff members from five university student services, including the counselling services at the Faculty of Computer Science, the Undergraduate Student Record Office, the Career Services Office, the International Student Office, and the Bachelor of Commerce International Support Program (BCI), were interviewed as their services were mentioned as helpful during the student interviews. The aims of the interviews were to understand (1) what kind of services the University of Victoria provides to Chinese international students, and (2) the influence of these services on Chinese international students. These data were used to better understand students' learning environment and experience. To recruit these staff members, I sent them each an invitation e-mail or went to their offices to talk with them. They all agreed to participate in my research without any hesitation after I introduced my research to them.

Measure

Multiple methods were used to collect data in order to get a thick description of the case, so that we can understand better and deeper students' perceptions and experiences.

Survey

A survey was employed to get a broad view of student participants' opinions about meaningful learning, also it aimed to elicit some major themes in students' perceptions that could be probed in later interviews.

During the data collection process, I changed the questionnaire twice. The original questionnaire was developed based on the themes of meaningful learning derived from the literature review and pilot interviews – all questions had options. But after I saw how

the first participant responded to the questionnaire, I realized that the available options I provided in the questionnaire would still lead students to give me the answers that I wanted to see instead of their own perspectives. So I deleted all options in the questionnaire and left two examples of answer for questions 6, 7 and 8 to prompt their thinking, as these questions might be too broad to be answered. But, after I got two students' answers of this second version questionnaire, I found that they just used my sample answers as their answers. I thought my sample answers might still not enable me to explore their perceptions. So, I deleted all sample answers in the questionnaire and changed question 7 to allow students to answer it without any extra prompts. Two students filled the first version of the questionnaire; two students filled the second version and six students filled the third version (see Appendix A, B, C for detail questionnaires). The change of survey made it impossible to compare different students' answers in the survey, looking for the similarities or differences among them. So I used students' survey data in data analysis only when the data had been confirmed in students' interview data. For example, when asked "When is learning meaningful for you?", Tian selected three options: "When it is needed for my daily life", "When it is necessary for my future goals", and "When I have a positive and supportive learning environment". These three answers were emphasized by Tian in his interview. So, Tian's answer of this survey question was identified as trustworthy data to support my findings.

Individual Interviews

All participants (including students and student services staff) participated in one-on-one semi-structured interviews. Interviews were audio recorded and I took brief notes while interviewing. To avoid linguistic misunderstanding and to facilitate participants' openness, interviews were conducted in interviewees' preferred language. The interview protocols can be seen in Appendix D, E and F.

Students' interviews were used to obtain their perceptions of meaningful learning. According to students' preference, interviews were done in a public open area, a classroom, and a recording room in the curriculum lab at the University of Victoria. All of the student interviews were conducted in Mandarin.

During the data collection phase, I changed one interview question – question 3a in students' interview questions. In the first four interviews, if students answered yes to

the question 3 – "Is learning in Canada meaningful for you?"- I asked them "between in-school learning and out-of-school leaning, which one contributes to it more?" Three students in the first four interviews had difficulties to distinguish the in-school learning and out-of-school learning. I spent a lot of time explaining these two terms to them. Through the first four interviews and the data analysis of them, I realized that this question didn't help me to answer my research question. So I changed the interview question to "What effect does the living experience during your school years in Canada have on your study?" Since the new version of question 3a had already been used as a prompt for the original version of question 3a, the change of question 3a didn't have significant influence in student's data. Two versions of the interview questions for students can be seen in Appendix D and E.

Student services staff's interviews were used to better understand students' learning environment and experience. Every interviewee received the interview questions before the interview. All interviews were conducted in these staff's offices and in English.

Focus Group Interview

Two focus group interviews were conducted in the last phase of data collection after a rough data analysis of all the questionnaires and individual interviews. In this preliminary analysis I summarized each student's data individually and came up with a list of categories and themes for the whole student data. After that, I realized that I needed to gather students together for three purposes: (1) to have them do a member check and give me feedback about the summary, (2) to invite them to discuss the emerging themes and categories, and (3) to evoke discussion about the two questions – When do you want to learn? When do you learn well? Morgan (1988) says focus group interviews are "useful for getting participants' interpretations of results from earlier studies" (p. 11). In the focus group interviews, I gave each student a summary of his or her individual interview and also the themes of the whole case study. I asked them to check on their own interview data first, for accuracy and trustworthiness. Then, I invited them to comment on the themes I had summarized. In the end, I asked them the two questions mentioned above (When do you want to learn? When do you learn well?). I intended to seek congruence and conflict in students' perceptions by inviting them into discussion with peers. I believed that this could help me discover any previously

unrevealed constructs, as Morgan suggests, "The hallmark of focus groups [interview] is the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a group" (p. 12). For Chinese students, who tend to be shy and reserved, a group interview could provide them with a kind of security that helps to elicit more opinions than the individual interviews will (Li, 1999).

It was very hard to set up a group interview since not all students were free at the same time. I emailed students proposing group interviews and the possible time for interviews. Then based on their feedback, I reset the interview time in order to match most students' preferences. Then I emailed and called the students one day before the group interview to confirm their attendance. Guan and Hua showed up in the first group interview. Fang, Kong, Tian, and Xian attended the second group interview. To build a casual discussion climate, I offered students some juice, fruit, and dessert in the group interviews. According to students' preference of language, the group interviews were conducted in Mandarin.

Document Review

During the interviews with student services staff, I asked them for relevant policies or information about their services. One student services staff member (BCI program) gave me a paper copy about their services. Other student services staff suggested that I could browse their websites. The information I got from the websites and the copy helped me understand better what student services these offices provide to students. As such it helped me understand students' learning environment and experience.

Data Analysis

The data analysis phase was carried through the whole research process from the time I got the first set of data till the end of the writing of the study itself. At the beginning of the data collection phase, I emailed every participant the questionnaire and the interview questions immediately after we established the first contact. Six students returned the questionnaire before their interviews, one student returned and two students filled it in just before their interviews, and one student finished the questionnaire a few weeks later after the individual interview. I analyzed the questionnaire data once I received it. The purpose of the analysis was to get the students' background information

and to perceive the students' main ideas, which made me more sensitive to students' themes during their interviews. For the student who gave his questionnaire to me after his interview, I asked him some questions about his educational history before the interview questions.

During interviews, I employed four techniques to make sure that I comprehended interviewees' words appropriately: I would ask the interviewee to repeat a comment or word if it was unclear; I would ask the interviewee to explain or specify a comment or word if I could not understand it (usually I asked for an example); I would rephrase a statement and ask the interviewee whether that was what they meant; or I would summarize their points at the end of a question or the interview and ask them whether my summary was correct or whether they had other things to add to it.

After each individual interview, I transcribed the interview data in the interview language as early as I could. While doing the transcription, I wrote down my comments and notes about the interview, also I read other available data, such as student questionnaires, interview notes or student services' documents, whichever could help me to understand the interviewee better. As I transcribed the interview data word by word and I did some reflections about the interview at the same time, the whole transcription process was very time consuming. It took me one hour to transcribe ten minutes of interview data. But, after I finished a transcription, I always had a clear idea what the interviewee's key points were, what I needed to change and how I could do better in the next interview. The data analysis through the data collection stage helped me adjust my survey and interview questions and also improve my interview skills for the next interview.

During my data analysis, if I found any part of the data that was unclear, I emailed the interviewee who provided the data and asked him or her to specify or to give me some examples to make their ideas clearer. If I met the interviewee occasionally on campus, I did follow-up interviews with him or her. In total, I did one follow-up interview with one student and two with another student. All follow-up interviews lasted less than ten minutes.

After I finished all individual interviews, I summarized each interviewee's main ideas. For each student interviewee, I gave each interview question a summary. I read

through every student's transcripts line by line, and I coded the words at a semantic theme level. Then, I wrote some assertions for each interview question. In the end, I had ten summaries including assertions and evidence. I sent the summaries to students via e-mail and invited them to do a member check. They were also informed that they were welcome to add and change anything. All students gave me response via e-mail or verbally in the group interviews, suggesting that my transcripts were correct and that they agreed with the summaries. For each student services staff interviewee, I summarized the key attributes of the services reflected from the interview data. Then I sent my assertions and the supporting quotes back to the student services staff by e-mail and asked them for comments and member check. Three student services staff gave me a response and made some change in their words. No staff disagreed with my summaries about their services' attributes and the logical relationship between the supporting data and the assertions I made about them.

After that, holistic analysis was used against all existing data, including survey result, transcripts, documents, and my research diary. The data was evaluated to determine what specific factors had been mentioned by students as components of meaningful learning, and then was grouped into categories. Each category was tallied. If it was mentioned by half of the ten students, it was deemed as a theme; otherwise, it was reported as a unique factor. Student services staff's data was used to help me better understand students' opinions.

Through the first holistic analysis, I came up with several themes, in which there were many categories and subcategories. During the group interviews I discussed these emerging themes and categories with students. One student (Fang) asked me to specify one theme that she could not understand. She reminded me to be aware that not all western pedagogies are applicable in China as they might not be suitable for Chinese society. In addition, she suggested that I summarize findings in a higher abstract level. All students who attended the group interviews agreed with the results of my data analysis. The focus group interviews were transcribed in Chinese and coded after they were finished. The group interviews' data was added to the former data and holistic analysis was used again against this updated and complete research data. The result of data analysis was sent to a disinterested peer and my supervisor for comments and

critiques. Their questions about the themes urged me to organize the themes in a more concise way.

In order to organize the themes better, as suggested by Miles and Huberman (1994), I made each theme a matrix of categories using a spreadsheet program: I put all the categories that belonged to the theme in the matrix and placed the evidence within such categories. Then I printed the forms and posted them on the wall (see Appendix H for a sample of the matrix). After that, I read, reread and examined the relationship between different evidence and categories; I moved some evidence across themes and categories. Also, I compared and contrasted different categories; I moved, changed, deleted, and integrated categories within or across themes several times before I finally came up with a set of categories and themes that were concise and logical enough to be written down.

The writing process is a way of thinking too. As Gillham (2000) said, writing can enable the writer to immediately perceive some inadequacies in his or her mind, but also it improves the writer's thinking. When I tried to write the themes and categories down, I was able to discover many flaws in my thinking. For example, I could see how weak some categories were, as their supporting data was not appropriate or the logical relationships between some themes and categories were not convincing. So, I reorganized data and themes within or cross categories again until I finally convinced myself that my analysis and explanations of the research finding were reasonable. At this stage, my understanding of the research findings was much clearer than before. Additionally, the student words quoted in the writing were translated from Chinese into English during this writing process. A former Chinese English teacher, who is also a disinterested peer, checked the correctness of the translation.

> The whole research process is dynamic and explorative. As Yin (2003) says,
>
> Very few case studies will end up exactly as planned.... The skilled investigator must remember the original purpose of the investigation but then must be willing to adapt procedures or plans if unanticipated events occur. (p. 60-61).

During the process of this study, some sub-research questions in the proposal that didn't work efficiently for the purpose of the research were modified. The data analysis, which began right after the first set of data was collected and employed through the whole study

period, enabled me to see the directions for change. Also, it made me become more sensitive to the data I was looking for.

CHAPTER 4 FINDINGS AND DISCUSSION

There are five sections in this chapter. The first section contains a brief introduction about the Chinese post-secondary education system, the ten student participants' background, and the four themes (Practical Learning, Learning under Pressure, Comfortable Learning, and Active Learning) revealed in this study. The following four sections are detailed explanation of the four themes. Each section presents one of the four themes by examining and discussing the categories and sub-categories that constitute the theme.

To make this chapter more readable, there are four things that need to be specified. First, in order to protect participants' anonymity, all participants' names in this thesis are pseudonyms. Second, all students' data presented in this chapter are my own translations. Because in Chinese the personal pronouns – "he" and "she" – have the same pronunciation, when students used a personal pronoun to refer to a person, it was impossible to distinguish whether the person was a female or a male. Thus I used "s/he", "her/his", or "her/him" wherever I needed to use a personal pronoun to translate students' words. Third, since the current study explored students' perceptions of meaningful learning mainly through inviting them to compare their post-secondary learning experiences in China and in Canada, most of the students' data was about "studying" (academic learning experience in or out of school). Students' ideas about general "learning" (any learning experience in or out of school) were revealed when they talked about their out-of-school experiences. They are presented in the section on "Practical Learning". Fourth, it is unavoidable that there are many comparisons between Chinese and Canadian education systems in students' data and my explanations of findings. However, the comparisons are just means to help us explore what kind of learning experience students prefer rather than the purpose of this study. All student data is only a glimpse of Chinese and Canadian education systems at some particular time – they are not complete views of both education systems. Also students' perceptions can only be understood by taking their backgrounds into consideration.

Section 1: Introduction

The purpose of this introduction about Chinese post-secondary education and student participants is to provide readers with some contexts of the student participants, thus their perceptions can be understood better.

Chinese Post-secondary Education

This introduction is made based on student data and my personal learning experience in a Chinese university from 1990 to 1994. These students attended Chinese universities from 1997 to 2002. However, the Chinese post-secondary education system they described was not much different from my experience. Therefore, the following information describes a picture of Chinese universities from 1990 to 2002. Ten student participants and I studied in eleven different universities or colleges in China, including five first-class universities, five normal universities, and one normal college.

Major and Course

Students selected their majors or specializations before they got accepted in the universities. Normally students could rarely change their majors in university. A university program normally lasted four academic years, and a college program took three academic years. There were two terms in one academic year. Students attended school from September to January and from March to July. According to Hayhoe's (1991) report, the State Education Commission in China designated the organization of time and the structure of all required courses in the specialization, and there were no electives; students normally took common courses (such as political study and foreign languages) and foundation courses at first, then gradually moved toward more and more specialist courses over four academic years. This phenomenon didn't change too much in the later 1990s and early 2000s according to the students' report. Although from the early 1990s many Chinese universities had adopted a credit system and allowed students to take elective courses in areas outside their own specialization (Hayhoe, 1991), compulsory courses were still dominant at the start of 2000s. Some students reported that although they could take a few elective courses, they didn't care about the courses because of the way in which the courses were set: the elective courses were worth little credit, and the courses were too easy as students who took the courses as elective courses and students who took them as compulsory courses were separated into different classes,

and the course instructors had different requirements for these two group of students. Furthermore, there were not many elective courses and students didn't have many options to select courses outside their majors. As Hayhoe (1991) says, the knowledge boundaries between majors were extremely rigid.

Teaching Method

The predominant instructional style was the lecture – teachers talked and students listened. The major instructional tool was the blackboard. What teachers taught and tested was normally limited to what the textbooks said. Students studied five full days a week at school according to the schedule pre-set by their departments. Some courses might have a class every weekday.

Class

Students studied in a cohort class over their academic years. Students in one class normally lived in the university dormitories with their classmates. Quite often there were class activities that everybody needed to attend. So, it was very easy to make friends between classmates and they usually had very close relationships.

Coursework and Evaluation

Normally there were not many tests and assignments for one course except one final exam. Evaluation was mostly based on the final tests and a little on attendance, midterms, and other assignments (if there were any). Before the final, teachers normally told students what would be included in the exams – in Chinese words, that's "hua zhong dian", means "circumscribe the key points". These key points normally had also been taught in class. Students reported that most students could pass the final tests by reciting those key points shortly before the finals.

Graduation

To graduate from a university, students needed to get enough credits. There was only one kind of degree. Students either got their degrees or not. That is, in terms of degree, there was no recognition for high academic achievement.

Participants

The ten student participants were born between 1978 and 1982. They arrived in Canada between 2001 and 2002 and started to study at the University of Victoria between

2001 and 2003. These students came from six different cities in China. Although I didn't ask students directly about the source of their financial support, it can be inferred from students' interviews that all students were supported by their families and some of them had large budgets. For example, some of the students were able to afford some luxuries in Canada, such as owning an expensive car, frequently having meals in restaurants, and having plenty of social and recreational activities. Six out of ten students took an ESL (English as Secondary Language) program – from one month to one year and a half – before they started their undergraduate program in the University of Victoria.

Two students had already finished a post-secondary degree before they came to the University of Victoria, and other students dropped their post-secondary programs in China after they had studied there for at least one academic term. At the University of Victoria, one student majored in computer science, one in business, and the other eight students majored in economics. Only one student studied the same major as she used to study in China. All the other students changed their majors. The detail of student information is listed in Table 1 (see Appendix G).

In the following section, students' reasons for pursuing international study and the main points of their perceptions are briefly described individually. They are ordered in the sequence they were interviewed.

Tian

Tian is the only student who came to Canada with the goal to study in the United States later. He came to Canada because it was easier to get a Canadian visa than an American visa at that time when he decided to study abroad; and learning in Canada could help him to transfer to an American university later since the Canadian education system is similar to the American one. Tian wanted to study abroad because (1) the learning ethos in his Chinese university was bad – students didn't study hard; (2) it was hard for him to get into a graduate program in the major he liked because of high competition; (3) it was difficult to make sincere friends in China as he felt other students made friends with him just because of his family background. Tian emphasized the importance of the learning environment – he believed students are influenced by other people's learning behaviors, thus a positive learning ethos is essential to increase students' motivation. He preferred teachers who are like masters (dashi), having deep

thought. Tian argued that the school restrictions on students' personal lives and thoughts were not appropriate and the learning content should be up-to-date.

Ping

Ping came to Canada to change her major, to study at university with a good learning ethos, and to lay a foundation for a better employment future in China. Ping preferred school education that was "flexible (ziyou shi)" - she liked to have choices over her major and courses according to her needs and interests, and have a lot of individual-study time for her to manage her study. Ping noticed a high "contrast of pressure (yali fancha)" between the external pressure of study at the high school level and university level in China. Ping attributed students' slackness in her Chinese university to the contrast of pressure and she believed that a right amount of pressure is necessary to motivate students to study.

Yan

Yan pursued a university degree in Canada because it was difficult for her to find a good job after she got a college degree in China. Also, she was influenced by the popular trend of international study. Yan believed that whether one can learn something or not is radically dependent on the learner – she emphasized that she didn't learn anything in China because she herself didn't study. However, she also acknowledged that students' initiation could and should be stimulated by teachers through coursework. She argued that if teachers didn't urge students to learn, students still would not study even if the learning was practical and important for students' futures. Yan preferred frequent assignments, which can help her review what she has learned and force her to study. She also emphasized the high financial pressure in Canada, which was also one factor that motivated her study.

Mei

Mei came to Canada to improve her English skill and competitive ability for employment, thus enabling her to easily find a good job after graduation. Mei believed practice is crucial in education. She said school should provide students with numerous chances to practice what they have learned instead of spoon-feeding them. Mei thought Canadian education was practical as she got a lot of practice in school and what she learned was needed in a work environment. Mei emphasized several times that

international study was valuable because at least she improved her English. Mei was very quiet and did not talk much in her personal interview.

Guan

Learning abroad was one of Guan's dreams. He started to plan for learning overseas in high school. He was also influenced by the popular trend of international study and thought a foreign degree would benefit him financially in the future. Guan used to think a Chinese university degree and a Canadian one were not identical in value although they were at the same level. After a few years study in Canada, he realized that overseas study was a costly investment whose benefit was not instant. As Guan saw more and more Chinese international students were going back to China to work thus making the value of a foreign degree decrease, he started to doubt the meaning of international study. Guan liked to have close and friendly relationships with teachers, but in Canada the language barrier inhibited him to build rapport with teachers. Guan also perceived that the failure of Chinese international students in the University of Victoria, especially in Co-op programs, was attributed to them not being able to get involved in the local society.

Kong

Initially, Kong came to Canada to study English after he got a Bachelor degree in a Chinese university. He thought high English proficiency would help him find a good job in China. He changed his mind after he had studied in Canada for a while. He started planning to immigrate to Canada. So he pursued a Canadian degree. Kong thought that in-class discussions should be encouraged as they make class active (huoyue). He liked to have convenient ways to communicate with teachers and he emphasized teachers' accessibility, which includes students' access to teachers and teachers' manner of help. Kong also believed that not every student is willing to study at school, so it is the school's responsibility to produce an atmosphere that motivates students to study.

Xian

Xian started planning to study abroad when she was in high school. All decisions she made after she graduated from high school had one purpose – to enable her to study abroad. For example, she studied some subjects (e.g., math, English) hard in her Chinese university, as they were useful for her future study in a foreign university. Xian pursued a

foreign degree in order to improve her general ability (zonghe nengli). Also, she was influenced by other people's good comments about international study. She believed that learning abroad would enable her to have more options in her future. Xian thought a right amount of pressure was suitable and necessary to urge Chinese students to study hard as they had got used to it in their former education. Especially, Xian strongly advocated peer competition and she attributed her slackness in Canada to the high autonomy and the lack of peer competition. Xian emphasized the fairness of an education system thus she preferred the evaluation based on multiple assignments or tests to the evaluation based on a single test. Xian highlighted the importance of Co-op awareness and practice awareness in her study – she became more active and purposeful by being aware what is required by the Co-op positions and what is practical or useful for herself. Xian's interview is the longest one among all the students' interviews and she gave me a lot of information about her Chinese university.

Hua

Hua pursued a foreign degree as she was influenced by the consensus in Chinese society about the international study – many Chinese people believed "everything in the foreign countries is good". Also, she wanted to improve her English as English was becoming more and more useful in China. Moreover, since she was not motivated to study in her Chinese university, she hoped that changing her environment would solve this problem and enable her to learn something authentically. Hua believed that a learning task that is too easy is meaningless, whereas a challenging one can motivate students to study hard. She thought she didn't learn anything in her Chinese university because the study was too easy there. Hua disliked tests a lot, especially when the grade of a course was based on one final test. She argued that infrequent evaluation made students so anxious that it caused negative influences in both students' attitudes towards their study and peer relationships.

Fang

Fang chose to study in Canada because a foreign university degree was more competitive in China than a local one; she received many positive comments about participation in international study from her former classmates in high school; and she disliked the high pressure brought about by the acute peer competition in her Chinese

university. Fang showed great enthusiasm in my study. She recommended herself to me, she was very eager to talk in her interview and she gave me some suggestions for my interview and data analysis. Fang brought forth a great deal of interesting and thoughtful ideas. To name a few here, Fang perceived that an active class was not only the one in which there are rich in-class discussions between students and teachers, but also the one in which she can be inspired by teachers' words or questions and think actively. Fang viewed this active thinking process triggered by teachers as a way to communicate with teachers and participate in class. She emphasized that showing caring was most important when teachers were offering help. Through her learning in Canada, Fang started to understand and respect multiple standards and variety. She believed the change in her attitude made her overseas study meaningful.

Ding

Ding pursued a foreign degree to improve his competitive competence for employment. Ding thought when teachers taught less he studied more actively. Ding believed that the benefits of a western educational system in a student's development are dependent on the student's age in some ways. Ding didn't like school because there was not much chance to practice what he had learned. Of the ten students, Ding talked the least and he refused to elaborate or confirm some words he said. So, his data is very limited. Ding's behavior might be related to his heavy course work and tight time schedule.

The Four Themes of The Findings

In this study I have found that there are four major themes (Practical Learning, Learning under Pressure, Comfortable Learning, and Active Learning) in student perceptions of meaningful learning. Student motivation and learning was enhanced when their learning was practical, comfortable, active, and when it brought the right amount of pressure to make it challenging; and students perceived that practical learning could benefit their personal development. In other words, practicality is the key in student perceptions of meaningful learning; pressure, comfort, and activeness are implicit themes of their meaningful learning.

Section 2: Practical Learning

Practical is translated from a term of the students – "shiyong", which means: to have a real use. In this study, students showed keen preference for practical learning. Students perceived that learning was practical when what they learn was useful in their personal lives; when what they learn could be connected to their social reality through practice; when they could learn authentically and what they learn could increase their general ability so that both their professional and personal development could benefit. Students perceived that practical learning improved their motivation and learning. There are four parts in this section. The first part presents students' preference for learning what is personally useful. The second part explains that students liked to connect theoretical knowledge with social reality through hands-on activities. The third part demonstrates that students valued practical learning that can improve their general ability. The fourth part explains the role of out-of-school experiences in practical learning. These four parts interpret students' perceptions of practical learning from four different perspectives and constitute a deep understanding of students' opinions.

Part I: Practical Learning is Personally Useful

All students associated meaningful learning directly with their perception of the usefulness of learning for their personal lives. When talking about why they came to Canada, all students answered that they wanted to improve their competitive ability (jizhengli), especially for their future employment (jiuye jizhengli). Although it was not guaranteed that all students would go back to China after they finish their undergraduate degrees, it was an available option. They expected that learning abroad could improve the probability of finding a well-paid job in China. Obviously, all students pursued an overseas degree for its practicality. In addition, when students were asked "When is learning meaningful for you?" nine students stated that when learning was useful for their future, it was meaningful. Their detailed answers are as the following:

> When the learning is needed for my future. (Tian, Ping, Yan, Mei, Xian).
>
> When I am learning specialist courses. They can be used in the future. (Ding).
>
> When learning can improve my knowledge level and employment options. (Kong).

> When learning can bring me long-term financial benefit. (Guan).
>
> When what I learn is useful for me and can be used in the future, or when learning can enhance my competence. (Hua).

Moreover, when being asked "Is learning in Canada meaningful for you? Why?" eight students believed that learning in Canada is meaningful for them. Six of them thought so because either their competitive ability for employment or their general ability had enhanced or would increase; three of them thought so because their attitudes changed and they believed this change would benefit their personal development. Two students reported that learning abroad was not meaningful, as they doubted whether their learning would bring them a better future because of the increasing population of Chinese international students who were returning to China or the decreasing gap of economic development between China and the western countries. Their words are:

> Because now there are so many Chinese international students, if you go back to China it's not guaranteed that you can find a good job…unless you are really good… Now I really think there is not much meaning to study abroad. (Hua).
>
> The last thing I want to see is that – it is true now – the distance between western countries and China is decreasing gradually. But, it doesn't mean I don't want China to reach other western countries' level of development. But, my stake is that China needs to spend longer time reaching this level. If I had recognized that China would develop so quickly, I would not go abroad. Because if what you learn for four years in a foreign country can also be learned in China, then what is the meaning to study abroad? … Yes, the degree I am studying for looks like a similar post-secondary degree to my former one, but I bet they are not identical [in terms of values], so I came here. (Guan).

Clearly, all data shown above indicates that students perceived the usefulness of learning as an important criterion of meaningful learning. In other words, when learning could help students achieve their personal goals, or increased their ability so that their future mobility could be enhanced, or changed their attitudes so that their personal development benefit, it was useful, thus meaningful for students.

Students associated the perceived usefulness of learning with increased motivation and better learning. Here is an example.

Q: In what kind of situations do you think you can learn well?

Xian: Still when the learning is useful I have motivation. Look, at that time when I was in China, students knew math definitely would be used later. So, everybody studied it. In terms of English, I studied it because I aimed to go abroad. Now similarly, which faculty offers courses that can help me to find a job, I will take the courses in that faculty first.

Tian: I take those courses required by the jobs [that I want to do].

Xian: Still we mainly study something in order to apply it in reality. Otherwise, the cost is so high. Who studies [those subjects which are not practical]?

Tian: I think I can learn well when it's useful or interesting.

Kong: Still usefulness is the primary thing, because you can learn what you are interested in later whereas you cannot learn the things you need to use in a job after you graduate from university. Generally speaking, if you want to learn, you can learn well.

This dialogue tells us two things. First, it suggests that the perceived usefulness of learning was positively related to students' motivation. It triggered students to either become willing to learn or develop a desire for study. Second, instead of answering how they could study well, students reported by talking about when they wanted to learn – this implies that students believed they could learn well when they are motivated to learn. This belief was also explicitly presented by Kong as quoted above ("Generally speaking, if you want to learn, you can learn well"). Students' beliefs need to be understood by connecting these to their cultural background. Chinese believe that all children possess the necessary capacity for higher development; effort increases ability and also leads to academic success (Stevenson & Lee, 1996). So, as long as Chinese students are motivated to study, they will put effort in it and they believe they can study well regardless of their current ability to study. Thus, for Chinese students, motivation is the key for their academic success.

The positive effect of the perceived usefulness of learning in student motivation and learning is much clearer when students talked about learning some courses in which they were not interested. Mei, whose majors were statistics and computer science, answered in the questionnaire,

> What I don't like to learn in school is computer science because of its bad future. I am not interested in it. But it might be helpful for me to find a job in the future, and to learn statistics I need to learn computer science, [so I have to study it].

Obviously, Mei studied computer science even though she was not interested in it, because computer science was needed for her secondary major and her future job. The reason of her dislike of computer science was also related to usefulness, as she perceived a major in computer science might not lead to a good career. In other words, a single major in computer science was useless for Mei. Similarly, when Yan was asked, "How can you learn well from the compulsory courses?" she answered, "there needs to be something that I need to use or can be used later in my job". Evidently, Mei and Yan's words suggest perceived usefulness was necessary to motivate students when they were learning something that they were not interested in. Conversely, perceived uselessness of learning decreased student motivation and learning. For example, Yan said, "To learn something that is not related to your future is useless. You will forget it after a while. It is a waste of time." Clearly, students perceived that when they could see the connections between their study and their personal development, they would learn and they could learn well even when the learning subject was not interesting for them. This reflects that students were mature and thoughtful enough to sacrifice temporary pressure for a bigger goal in their future.

In summary, student data indicates clearly that students preferred learning that is useful for their personal lives, and the perceived usefulness of learning increased student motivation and learning.

Part 2: Practical Learning Is Connected With the Social Reality Through Practice

Nine students liked to practice using knowledge to solve problems that were related to the social reality. In some students' words, that is, they preferred "lilun lianxi shiji", which literately means: "the theoretical connects with the practical". It can be interpreted as "connecting theoretical knowledge with the social reality through practice", "applying theoretical knowledge into practice in the social reality" or "integrating theory with practice". So, "lilun lianxi shiji" has two senses: (1) to connect theoretical

knowledge with the social reality, and (2) to learn by doing, through practice or hands-on experience. In Chinese, "lilun lianxi shiji" can be used as a noun or a verb.

Students' preference for "lilun lianxi shiji" is shown in the following two examples: When asked to describe an out-of-school learning experience that she liked, Xian talked about a course on skin cancer she took out of school. The reason she liked it was: "I can apply what I learned in that course in my life" The knowledge Xian learned from the course guided her to buy suitable sun protection products. When asked "Do you like school? Why?" Ding answered: "I don't like school, because I cannot apply what I learned in school; there is no opportunity to practice".

Students perceived that "lilun lianxi shiji" was positively related to motivation and learning. They remarked that "lilun lianxi shiji" made learning easier and more interesting, and it also facilitated the development of their high level thinking abilities. For example, Hua thought "lilun lianxi shiji" helped her learn and it was what education aims for:

> Q: What methods or styles of teaching help you learn?
>
> Connecting textbooks with the reality. The original purpose of learning is to apply knowledge in the real life.

For Hua, university education should aim for prompting higher mental functions and "linlun linxi shiji" could help to achieve this goal. When teachers didn't help students connect theoretical knowledge with the social reality, Hua viewed their classes as boring and as having low teaching efficiency:

> Q: What do you not like to learn in the school? Why?
>
> Dead knowledge – something needed to be recited and memorized. University should be like a university. Reciting and memorizing are learning methods at middle school or high school. A university needs to improve students' ability to analyze and understand. Take the course – "Organizational Behavior" – for example it was about how to manage a company and how to cooperate with fellow workers. It was supposed to be very useful. But the teacher just repeated what the textbook said; the class was so boring. We were not able to remember the materials well either, because we could not connect them with the reality.

Yan thought when she could "lilun lianxi shiji", she was more interested in learning – thus she learned better. Yan reported one learning experience she liked when she was studying a hotel management program in China. It was a practicum at a hotel in Singapore. She said,

> We practiced what we had learned about hotel work there. I sensed I learned a lot... as I have practiced what I learned in reality. A theory must be integrated with practice. If there is only theoretical knowledge and no practice, I will forget the knowledge. When we were in the bar of the hotel at Singapore, we mixed drink. We thought that was interesting – we learned what the drink was made of. If you think something is interesting, you will remember it. If there is only theoretical stuff in your study, you will feel bored and it is meaningless.

Kong believed "lilun lianxi shiji" improved learning. He said,

> In my ideal, school should provide more chances for students to contact with society, as such, students can use what they have learned and connect theory with practice. Also, students become aware of their own shortcomings through practice. Thus they can make up or enforce their knowledge.

Obviously, Kong thought practice enabled students to use what they had learned, and then students could get feedback; based on that, students could improve their learning.

In summary, it is indicated that students preferred learning that is connected with their social reality, and includes many opportunities to practice what they have learned. Students perceived that when they could connect what they had learned with their social reality, their motivation and learning enhanced.

Part 3: Practical Learning Can Help Students Improve Their General Ability

In this study, seven students mentioned different concrete methods that could make their learning practical, such as Co-op, labs, using examples, presentations, projects, and group work. All these methods reflected that students preferred practical learning that could improve their general ability, and have them learn something that was useful for themselves and also useful in their social reality.

Co-op

Co-op, the abbreviation of "Co-operative Education", is "an integrated approach to higher education which enables bright, highly motivated students to alternate academic terms on campus with relevant, paid, full time work experience" ("What is UVic Co-op?", n.d.). Two students mentioned Co-op as a way to connect their theoretical knowledge with their social reality through practice. For example, Ping talked about her ideal education:

> Ideally, I think, to learn something we should integrate theory and practice together. Like there is a Co-op program in UVic. I think it is very good that we have it. You can spend two terms learning the theoretical knowledge, and then you go out to work during a vacation to apply what you have learned. I think if you apply what you learn in reality, you can master the knowledge in a more flexible and stable way. You apply knowledge in the reality, and then you know how to do it [when you face real problems later]. This enhances your ability too.

Clearly, Ping believed Co-op could improve students' understanding of the knowledge and made it their own as in Co-op students learned how to use theoretical knowledge to solve real problems in social reality.

Xian tied Co-op to motivation – A Co-op position can serve as a goal that motivated her to learn. When Xian was asked, "In what kind of situation do you want to study?" She answered,

> I saw a post about a Co-op position yesterday. I had a strong desire to learn right after that. There was a lot of information in it, including many things that I didn't notice before. It said the job needs a person who has experience with a program, a good command of writing, and is bilingual. It's a kind of realistic pressure. Actually I don't feel anything special while I attend classes, but once the learning is connected with the reality, I am immediately motivated.

Obviously, Co-op positions brought Xian specific goals for her study and these specific goals increased her motivation. The positive effects of Co-op on student motivation and learning are shown more clearly when Xian brought forth an idea of "Co-op awareness" in her interview. She said,

> But here [in Canada] you will have an awareness of Co-op. I think all the time what can be used in Co-op positions if I take this course. I will usually pay attention to this question. Every student pays attention to this problem because every one cares about making money, and there are several people competing for one position…
>
> Q: Then you mean you will improve yourself based on the requirements of the Co-op positions?
>
> Yes. For example, if they require more computer knowledge, then I will study it more or take one elective [computer] course.

Apparently, in Xian's definition, a student who has Co-op awareness will adjust his or her study in order to match the requirements of the Co-op positions. In other words, when a student is aware of Co-op, his or her learning is intentional and relevant to himself or herself.

Ping and Xian's data indicates that in students' perceptions, a good Co-op program can affect students' motivation and learning positively before and after they find a Co-op position. It also suggests that students wanted to learn something that is useful in the current society.

Labs

Labs were also referred to as practical ways because students could practice theoretical knowledge in the labs. The labs students mentioned were almost all computer labs, in which students learned how to use some computer programs. Four students perceived labs as helpful to their learning. For example, Yan said,

> Every time after her or his lecture, the computer teacher gave us assignments – labs. You apply and practice what you have learned in the labs. After you practice it, you know how to do it.

Both Yan and Hua mentioned computer courses when they were asked to describe a learning experience in school that they liked. Yan said she liked the computer course because:

> The knowledge in the textbooks, if you just recite, recite and recite, till the end, all you get is dead thing that will be forgotten…. I like the computer course because

> it is a hands-on activity. That is, you integrate the theoretical knowledge into the practice, and eventually you would learn the knowledge in the textbooks.

Hua said,

> What I like about the computer course is you need to do it by yourself, not just think. I like this.... I like to operate those math functions in the computer. In this way, I can remember them better too.

Evidently, students preferred labs because they could get the opportunity to learn by doing. Students perceived that they learned better with the hands-on experiences in the labs.

Not all labs were practical in students' perceptions. The practical labs that students liked taught up-to-date content. The lab content affected student motivation and learning. For example, Yan disliked a Chinese computer lab, as it was very outdated thus not practical. Yan said, "They just taught us basic typing. I didn't learn something deep and practical during one term." Whereas Yan liked the computer labs in University of Victoria because what the labs taught was very up-to-date and could be used broadly in the normal daily life, such as making a web page and using Windows Office software. Similarly, Xian reported that she studied a statistics software program in a lab and "because the program was commonly used in Co-op positions, everybody studied in earnest." Clearly, students lacked motivation to learn in the labs that are not practical. Students' data indicates that a practical learning in students' perceptions was the one in which students can learn something that is useful for themselves and can be used in the current society.

Use of Examples

Three students referred to the use of examples as a way to help students build the connections between theoretical knowledge and social reality. Students welcomed teachers using examples in teaching, as Tian said,

> A few teachers were well regarded in my Chinese university because they were realistic – they told us about current events and provided up-to-date examples. Although our textbooks were sort of old, they always taught us new things.... After all, the new things must happen continuously, right?

Also, students associated examples with better learning. For example, Hua thought she could learn authentically in Canada because:

> Some teachers will connect the book contents with reality. That is they teach more broadly than the textbook. They might analyze some cases they read in the newspaper or they have heard about. They will analyze them according to the textbook.... If I don't understand something what I read in the book or what they are talking about, when they put it in the real life situation I will learn what I should do and how I solve it if I face this situation. That is I know a little bit about how to think and what to do if I encounter a similar situation in the future.

Clearly, Hua perceived examples helped her understand, and contributed to the development of high-level thinking abilities thus benefitting her future. There are other students' data that indicates students' preference of examples related to their need for active learning. Instead of presenting them here, they are introduced in the section on "Active Learning".

Similar to the labs, the examples that could have positive effects on students' learning were the ones related to the current society. Students' preference of up-to-date examples is interwoven with another desire: they needed up-to-date learning content and resources that presented the current social reality and contained more up-to-date examples.

Four students mentioned up-to-date learning content as valuable and they disliked outdated learning content. For example, Ping said, "the more advanced knowledge has a better future of development." Tian was agitated when he talked about the outdated textbooks in China as they only contained outdated examples. He raised his voice a little and said:

> I think the textbooks were quite old. The textbook used in an accounting course I took at that time was an edition from the 1970s. We were almost at the beginning of the twenty first century. We still used the 1970s curriculum. Economical Theory's textbook had already been changed more than ten versions in the foreign universities, we still used editions from the 1980s. The examples in the book were so old. Now it is an information society, the change of the society is so huge, but nothing in the book is related to this change. It is one thing in which I felt

> relatively disappointed.... Some new events, you should keep up with them. Now it is the knowledge economy and information era. The things we already saw in our middle school and high school years, the things that were well known from TV and other media, were not included in our university education. That's not good. It's wrong.

Clearly, students wanted to keep up with the current society and they perceived up-to-date learning content would enable them to do so. Learning up-to-date knowledge might make students think that they are not wasting effort learning something that will not be practical in their future. As such, what students learn is more useful and worthy for them. Then student motivation can be increased in this way. Also, it is possible that since the up-to-date learning content presents the current social reality better than the outdated one, the connections between the social practice and the learning content might be easier built. Thus student learning is facilitated. So, students' request of up-to-date learning content actually is also a reflection of students' need of relevance in learning. What is up-to-date and practical in students' perception is related to what they already know and what is required in the social reality. The content that they already know is outdated, and the content that will not be used in the real world is not practical for them. Once again, students' preference for up-to-date examples suggests that practical learning in students' perceptions was the one in which students learn something that is useful for themselves and can be used in the current society.

Presentations, Projects, and Group Work

Four students mentioned presentations, projects, and group work as ways to learn some practical skills that can be used in their future. Therefore including presentations, projects, and group works in the classroom instruction made learning more practical. For example, when Tian talked about the meanings of learning in Canada, one meaning he mentioned was that he gained more practical abilities. Presentations were instruments that helped him improve practical abilities – some skills that have long-term benefits in his future, thus enhancing his general ability:

> Learning in Canada is meaningful.... Chinese education makes students good at theory, but lacking in practical abilities. In Canada, you need to do many things

> by yourself. There are always presentations, something like that. It's an exercise for you.... Presentations can increase your public speaking skills, your confidence, and many other things. Additionally, you need to prepare materials by yourself, think about how to impress audiences and other factors. So doing presentations help you improve general ability... not only has it helped me to master what I have studied, but also it is an exercise and experience to speak in public. You need to speak in public when you work in society. If you have never done public speaking and presentations before, you will be very anxious when suddenly you are required to do it in your work. And you also will be exhausted when you are doing it. To learn to do presentations now is helpful for the future.

Mei thought learning to do projects and presentations at school was practical because it helped her develop skills, such as team work and communication, and interpersonal skills, all of which are needed in the employment environment; and it improved her English proficiency, which was one of the major goals in her international study:

> In this Canadian university, practical skills are more emphasized. I think what I learn – some practical skills will still be useful after I graduate.... For example, in some classes quite often we need to do presentations and projects. I think it's helpful for my future.... I think the projects and presentations are close to things [I might do] in future jobs, because I think my future jobs will involve a lot of projects requiring collaboration with several people.... So they are good for my future.... I sense sometimes doing a presentation can increase your confidence.... The more you do, the better you can do. Right? It's not that popular in Chinese universities, right? I think I need to express my opinions later in my work too, so it is helpful.... And I am here to learn English. So, presentations help English learning. I think it is a major benefit of doing presentations.

Similar to Mei and Tian, Xian recognized doing presentations, projects and group work in university helped her improve practical skills that are needed in her future, so she persisted in learning to do them even though she had difficulties doing them:

> I don't like projects now. Every time teachers arranged group work, I felt worried.... The process of doing [presentation and group work] was painful....

> [But,] presentation and group work can help me practice my oral English and increase my awareness of speaking English, also they improve co-operation skills. Because these formats are popular here and also they are required in future jobs.... I must try my best to adapt to these formats, although I am still not used to them now.

In summary, student data indicates clearly that in students' perceptions some concrete methods, such as Co-op, labs, examples, presentations, projects, and group work made learning practical, and thus enhanced student motivation and learning. Students' preferences for these concrete methods actually reflect what students really wanted to learn – high level thinking abilities and skills that have long-term benefits in their lives, such as problem solving, analyzing, planning, communicating, cooperating, interpersonal skills, multi-languages ability, and so on. These abilities and skills are generally useful in many different situations and can help students deal with many different problems inside and outside school. Developing these abilities helps students transfer from school to the work environment or social reality more easily. This interpretation suggests that a practical education valued by students helps students enhance their general ability, thus improving their autonomy and mobility in human society. This understanding of student perceptions of a practical education is further supported by students' acknowledgement about the meaning of their out-of-school experiences in the following subsection.

Part 4: The Role of Out-of-school Experiences in Practical Learning

What are Out-of-school Experiences?

Out-of-school experiences refer to all experiences that happen outside school and are not required by the school curriculum. For example, students' living experience and social lives off campus. They belong to out-of-class experiences – what happens outside the classroom – which Kuh (1995) studied in his article, "The Other Curriculum: Out-of-Class Experiences Associated With Student Learning and Personal Development". Kuh refers to students' out-of-class experiences as the other curriculum. Out-of-school experiences are narrower than the out-of-class experiences that Kuh discussed, as they are limited to the experiences that happen in the physical environment out of school. To

distinguish out-of-school experiences from out-of-class experiences is to highlight the importance of out-of-school experiences for international students.

For international students, an international study is normally accompanied by living alone in a foreign country, communicating in a foreign language, encountering a new environment and numerous new social rules, and dealing with people from one or many different cultures. Thus, there are a lot of new experiences for international students in their out-of-school lives. This might be particularly true for Chinese international students, as they have comparatively less former experience to deal with people from diverse cultural backgrounds than the students from America or Europe. In this study, all students lived off-campus, except for one student who lived with a relative who was also an international student; all the other students lived alone with no family members around.

The Positive Influence of Out-of-School Experiences

The positive influence of out-of-school experiences is reflected in four students' answers of the question: "Is learning in Canada meaningful for you? Why?" As mentioned in the part 1, eight students believed that learning in Canada was meaningful for them. Four of these reported one meaning that was related to their out-of-school experiences. Three out of these four students' words are presented in the following. One student's (Xian's) data is presented as a unique factor at the end of this part.

Ding said that his learning in Canada was meaningful because "It urges me to improve my independent living ability".

One of the meanings of Kong's learning in Canada was that he formed an attitude of open-mindedness through seeing different life styles and cultures out of school, and encountering different opinions in school. He viewed this change of personal attitude as a benefit to his personal development:

> At least through the overseas experience, I learned to experience another kind of life. And I got to know different cultures and customs in daily life, and perceived the differences between different cultures, and different opinions.... I think, be able to broaden my horizon and open my mind, these are the benefits that I gained at least through the overseas experience.... These benefits didn't help my study,

> but they help me personally.... For example, I started to think those things that I have never thought about before.... For instance, last time I audited a history class. When they were discussing whether the Opium War brought China any benefit, a Taiwanese said the war was good. We disagreed with her/him. Then the instructor said it might be good for China to open its door to the outside world. But how can you judge it good or evil? From our point of views, it must be an evil war. S/he said it was a good war from the point of propelling the development of China. I thought even Taiwanese have such a different view from us – Chinese in Mainland China, let alone westerners.... [From that] I think we cannot use our own standards to judge other people, as your standard of right or wrong is acquired through your culture and education. Different people in different cultures and societies will have different standards. It might cause a huge difference [in people's opinions]. In other words, you need to be aware of such differences and try to embrace them.

For Fang, the meaning of learning in Canada lay in its influence on her attitudes. Fang believed that the most important thing to learn at school was not some theoretical principles but "the attitude of patience and tolerance – it's a great wisdom". Fang perceived her international learning experience, as a whole, changed her attitudes about life and people – she started to understand the diversity of life and human beings, and learned tolerance through her social lives in and out of school:

> There are some invisible benefits through learning in Canada. That is, personally I learned a lot of things, like I made a lot of friends. And then, there was only one standard for a good person or a bad person in China. For example if a female student goes to a pub, I would think of her as a bad girl. Now I think – I go to pubs too – this is not a standard of a bad or a good person.... I learned tolerance. Every person has different life styles. In China, there was only one life style. The people I met all had one life style; they all were good people. If not, I would not have contact with them. Here things are different. No standard. A good person might drink, use marijuana, or smoke, but s/he still is a good person and I still would be willing to make friends with her or him.

Clearly, the above student data indicates out-of-school experiences improved students' independent abilities and/or changed their personal attitudes. Students viewed this influence of out-of-school experiences as positive. Actually there is more student data showing that students realized that out-of-school experiences brought them positive influence in their independent ability, although they didn't list this influence as one factor that made their learning in Canada meaningful. In this study, seven out of ten students reported that they gained some basic living skills, such as cooking, solving living problems, and taking care of themselves through their living experiences in Canada thus they became more independent.

As a person is a whole, it can be expected that the influence of out-of-school experiences should not be just limited to students' lives out of school, it can also contribute to students' in-school learning. Although not all students were aware that what they gained in their out-of-school experiences could affect their academic study, three students (Ping, Fang, and Xian) acknowledged the influence of out-of-school experiences in their learning – the out-of-school experiences changed their attitudes, and then their new attitudes affected their in-school learning.

Ping perceived that her out-of-school independent living experiences might increase her willpower, thus she could overcome the difficulties in her study:

> The out-of-school experiences should have some influence in the in-school learning.... Maybe you encounter many difficulties out of school, but you know you need to overcome them while you are studying abroad alone. Maybe as time goes by, you will have stronger willpower – at least you can face some setbacks... and when you encounter some difficulties in your study, you can overcome them.

Fang's understanding of multiple standards and diversity enabled her to invest some effort in non-academic activities, thus she developed some practical skills, such as time management, multiple tasks management and so on. In other words, her general ability improved and she started to develop as a whole person:

> Now I think I don't pay as much attention to academic achievement as I did before. I participate in some non-academic activities, I volunteer, I tutor and I do part-time jobs. Although someone told me these kinds of opportunities were

> available in China too, I could not grasp them [when I was in China]. I focused too much on study. I put all my effort in my study.... It doesn't mean that I don't have the desire to get an A; it just means that now I can arrange my time more efficiently.... You think the person who gets an A will know more than the person who gets an A-? Not necessarily. I think what you learn should be applied to the reality. The grade is just one standard. Like I might have lower marks than one person, but that doesn't mean I know less than him. And I not only just study but also still have time to read other books and do other things that I am more interested in.... I used to think there is only one mode of life.... Now I have different understanding of life. Maybe I changed after I came here.... Maybe my life becomes more colourful after I came to Canada.

In summary, student data indicates that students' out-of-school experiences improved their independent ability thus increasing their general ability. In this way, out-of-school experiences made their learning in Canada practical. Additionally, some students' out-of-school experiences triggered them to change attitudes. Students valued this kind of change and they believed it benefits their personal development and/or in-school learning. This suggests that a learning that can help students form enduring attitudes was also practical and meaningful for students; out-of-school experiences made international study practical by helping students form attitudes that could benefit their future development. Actually, Dewey (1938) has greatly emphasized the importance of attitudes. He believes the change of students' attitudes often plays more significant roles in students' personal development than the change of students' academic ability. Dewey says,

> Perhaps the greatest of all pedagogical fallacies is the notion that a person learns only the particular thing he is studying at the time. Collateral learning in the way of formation of enduring attitudes, of likes and dislikes, may be and often is much more important than the spelling lesson or lesson in geography or history that is learned. For these attitudes are fundamentally what count in the future. (p. 48)

Unique Factor – Xian's Practice Awareness

Xian's data is presented as a unique factor in this section on "Practical Learning" because it suggests an important dimension of a practical education and she is the only person who mentioned this dimension. Xian brought forth an idea of "practice awareness (shijian yishi)" when she reflected on the meaning of her learning in Canada. Xian believed learning in Canada is meaningful for her. Her reason is twofold:

> On the one hand, I really think that I got many practices in daily life. From the very beginning, to open a bank account, rent a room, and apply for school, everything, I did them by myself. My general ability really improved a lot.... [On the other hand,] the learning methods in two countries are different. Here it is totally free, so learning here requires very high self-control.... I need to be responsible for the money I pay for every course. Because every course is very expensive, I need to study it well. Also here I emphasize practice more; I started to have "practice awareness" – a consciousness to connect school knowledge with practice. I didn't have this awareness before when I was in China. All I learned in the Chinese university were theories, not very practical. Here, I only learn what I want to use or do in the future. I don't waste my money and time in other things.

Obviously, Xian's meanings of learning in Canada were the improvement of her general ability, and the change of her attitude – she formed "practice awareness" in Canada and became more practical.

From Xian's data above, it seems the out-of-school experiences improved Xian's general ability, and the in-school experiences caused the change of her attitude. But, the change of Xian's attitude actually was also caused by her out-of-school experiences, as the following data makes this point clearer:

> One influence of my out-of-school experiences on my in-school learning is I will look for materials by myself. I will not feel scared of anything. I have to ask questions by myself anyway. My subjective activity increases. That is, I have autonomy. Now if I lack anything, I will go to look for it. I will ask people for it. In other words, I am more aware of practice.

How Xian changed her attitude can be explained in the following way. Firstly, by living alone in a foreign country, Xian was pushed to respond to daily living problems actively and solve them independently, in her words, that is, she started to be more aware

of practice. Secondly, in school Xian was required to take responsibility for her own learning, and the high financial cost of study pushed her to invest her money and effort in the subjects that were really useful for her. Thus Xian developed an awareness to take initiative and make her learning useful. For Xian, this awareness was also referred to as "practice awareness". So, both in-school experiences and out-of-school experiences contributed to the formation of Xian's "practice awareness", and as the consequence of the change of her attitude, Xian changed her ways to deal with problems in and out of school.

In Xian's definition, "practice awareness" includes two senses: (1) a consciousness to make one's learning useful for oneself in one's social reality, and (2) a consciousness to be active – actively think and act. In other words, a student who is aware of practice is the student who takes on initiative in his or her life, explores and solves problems actively, and looks for relevance between learning materials with oneself and one's social reality. Xian's data indicates that in her perceptions practice awareness had a very positive influence in her motivation and learning and she valued the change in her attitude as much as she valued the improvement of her general ability. Similar to Fang's, Kong's, and Ping's data about out-of-school experiences, Xian's data suggests that out-of-school experiences can make learning practical by helping students increase general ability and form some important attitudes which can benefit their holistic development. It also suggests that a practical learning can be the one that can cultivate "practice awareness" in students' perceptions. In other words, it is able to make students be aware of that they need to be practical and active in their learning.

In summary, the influences of the out-of-school experiences appear to be by-products of an international study, but these influences on students' general ability and attitudes might have a more important role in students' holistic development than the influence of in-school experiences. Thus out-of-school experiences make students' learning in Canada more practical, thus meaningful.

Section 3: Learning Under Pressure

Pressure (yali) in this study refers to a kind of pressure that students receive in their study. Several students mentioned a need for pressure in their study. The source of pressure varies for different students, including course work, admission, graduation, tuition fees, parents, peers and teachers' ways of teaching. In students' perceptions the right amount of pressure was necessary for motivation and learning. There are two parts in this section. The first part presents the causes of pressure from student perceptions, and how these causes affected student motivation and learning. The second part explains the benefits of pressure from the students' perceptions.

Part 1: What Causes Pressure?

Pressure From Course Work

Students perceived that the quality and quantity of course work, which included tests and assignments, brought them pressure. When course work was easy and its amount was small, the pressure was low. Otherwise, the pressure was high. Six students recognized the effects of the pressure from their course work in their motivation and learning. For example, Ping linked the pressure from course work to higher motivation:

> When there is pressure, I want to study. Say, there is a test coming. If you think you are still not able to do it well, you will study very hard for it.
>
> Q: Then in your ideal, school should give you pressure?
>
> Yes. There should be tests, something like that.... If there is no pressure one will become lazy. Then if you think there is no pressure from the course work, and it's still far from the finals, you don't study.

Students reported that when there was low pressure from the course work, they didn't put much effort in study. For example, Yan said one of the reasons that she didn't study in China even when what she learned was practical was because of the lack of pressure from the study – every course she studied hardly had any assignments. Normally there was only one final in one course and the final was not difficult either, as "teachers gave you some materials before the exams and let you recite them". Yan complained, "Totally there was no pressure to push you to study." Similarly, several other students

reported that in China they had little course work, so they slacked most of time and just studied shortly before the finals as this strategy could help them pass the finals.

Although this learning strategy was efficient, students were not happy about it. They complained they learned badly by just studying a short time before the finals. For example, Kong sensed they could not understand the learning material authentically in this way:

> ...[In China] we could just study the exam points handed out by the teachers before the finals and we could pass the finals already. We didn't need to connect all these points and integrate them into a system. Although the exam points were the essentiality of a course, authentic learning is impossible if we just bolt the exam points before the finals without getting a good understanding by connecting different contents together.

Ping also perceived the crash study before the finals only resulted in superficial and temporary memory without deep understanding:

> ...you browsed the exam points before the final and gained a superficial understanding. You remembered them at that time – temporary memory – but two or three days later after the test, someone asked you what has been tested and you didn't know. You had forgotten all of them. It seemed like you had never learned.

Obviously, students had an expectation to learn knowledge authentically in university. They also understood authentic learning took time, and required them to study consistently, digest what they have learned and weave their learning together into a system. They didn't want to just study for tests.

Students gave positive comments to high pressure from frequent course work. They perceived this pressure increased their initiative and motivation in learning and also helped maintain them. For example, Kong said:

> [In Canada] we have tests frequently. The course grades are based on work done through the semester. You need to keep on studying to get a high grade.... Sometimes if you are loose with yourself and you get a low mark in one test, then it is bad for your course grade. Here the academic pressure is higher than that of China.... In terms of learning results, I study much better in Canada than in

> China...because the academic pressure and the educational system in Canada increase students' personal willingness and initiative to study.

In summary, students perceived a pressure from appropriate course work was necessary to urge them to put effort in their study consistently.

Pressure From Teachers' Way of Teaching

Teachers' way of teaching also brought students pressure. When the teaching content was difficult or far beyond what the textbooks said, it produced higher academic pressure than the one that was produced when the teaching content was easy or limited to the textbooks. In other words, the different breadth and depth of what teachers taught brought students different academic pressure.

One student associated teachers' way of teaching with motivation and learning directly. Hua viewed not getting enough pressure from teachers as a reason that demotivated her in China:

> Teacher was a factor that made me not willing to learn too. Teachers did not force you to learn. For example, when I was studying in China, the whole blackboard was full of teachers' notes – they told you everything. What you need to do, they told you all. It was really meaningless to learn in this way.... What they taught was quite simple. They just taught what was in the textbooks, which was very easy to understand.... Because they told you everything, you didn't need to think too much. When the finals came, you just needed to copy what they had told you.... [But] we could not learn anything in this way. It just made the finals easy.

Obviously, Hua thought Chinese teachers didn't give her enough pressure to urge her to learn by only teaching and testing what textbooks said and teaching everything in great detail. This kind of teaching made learning too easy to be interesting for Hua. She could not learn well either as she was not encouraged to think by herself. Whereas when her teacher's way of teaching made learning more challenging, Hua started to learn actively:

> [In Canada] after attending teachers' lectures, you still need to read the textbooks by yourself.... For instance, in the class Global Business, what the teacher taught was not in the textbook. You need to read [textbooks], think by yourself, or listen to his or her lectures.

Another student, Ding, didn't report directly that teachers' way of teaching caused pressure, but he also connected teachers' way of teaching to active learning. His data is used here to support Hua's perceptions. Ding stated that he didn't study actively in China because:

> It seemed that Chinese teachers always pushed you. [Thus] you didn't have much consciousness of personal control.... Taking the Economy course I took in China as an example, there might be five classes in a week, and the teacher taught us in great detail in every class. Thus the learning content was cut into small pieces and handed to you, you didn't need to study by yourself. You could slack through the term. As teachers had told you all the key things, you didn't need to read books by yourselves. You could just read and recite what teachers had told you. You could pass exams in this way.

According to Ding's data, the Chinese teachers in his Chinese university pushed him a lot by teaching in detail in every class and having frequent classes in one week. In contrast, Canadian teachers pushed him less as they had less instructional time and they taught in less detail than Chinese teachers did. In this case, Ding started to study actively. He said:

> That is here [in Canada] I am more active than I was in China [because] nobody pushes you.... The teachers here only point out the key points and give you the outlines of the learning content; you need to enrich the content by yourself and you need to read on your own. If the teacher doesn't tell you, and you don't read the textbooks, you will be over.

Superficially, it seems that there is contradiction between Ding's words and Hua's – in both Ding's and Hua's Chinese universities their teachers taught everything in great detail, but Ding thought this way of teaching pushed him a lot, whereas Hua thought it didn't push her at all. However, their different opinions about "push" actually suggest that to urge students to learn by teaching everything in great detail was not an efficient way to push students. When teachers teach students everything, they do not give students the pressure to think by themselves. Therefore, some students (e.g., Hua) might not view this way as pushing, while others (e.g., Ding) might think that this kind of push only squelches their autonomy and discourages them to take responsibility for their study.

However, from Ding's and Hua's data, it is clear that no matter whether students viewed teaching in great detail as pushing or not, they didn't value this way of teaching.

Ding's and Hua's data indicates that in students' perceptions when teachers taught less, personal control and initiative were prompted – students needed to actively search for the information that they could not get from teachers before they could finally understand the meaning of what they learned, instead of just writing and reciting notes. Thus they needed to think. Whereas when teachers taught everything in the class, they spoon-fed students – Hua and Ding acted as passive learners. Hua's data shows that she didn't learn well as a passive learner. Hua's and Ding's data suggests that when teachers taught less detail, students perceived greater pressure to take responsibility of learning and study actively. Students valued this pressure as it benefitted their learning and motivation.

Pressure From the Grade Requirement of Graduation and Admission

Three students associated the pressure from the requirement of graduation and admission with their motivation for learning. They reported that they study harder in Canada than in China. One common reason among them was that they got higher pressure from the grade requirement of graduation or admission. For example, Tian said that in China to get a degree it didn't matter whether your mark was high or low as long as you passed. But, in Canada, since the kind of degree he could get was related to his course grades, he needed to be careful of his study all the time. Tian said:

> If you want to get an Honours degree, you need to get at least B- for each course you take. For example, a midterm in one course was worth 30%. If I could not do it well, it would be difficult for me to get a course grade of B. If I cannot get B, I will not be able to get the Honours degree. So, I study hard here.

Tian studied hard to meet the requirement for graduation. Ping studied hard in Canada because of the pressure of admission. Ping answered the question "Why do you study so hard here?":

> Because I don't want to get a B mark or C mark, or something like that. I think, no matter how, I need A-. Because at that time before I was admitted to the program the business program in UVic required a high GPA, I was extremely

> afraid of not being admitted to the program, or having a low mark that could affect the admission to other faculties.

Clearly, a high standard for graduation and admission was a positive pressure that motivated students to study harder. The positive effect of tests on students' motivation and learning revealed in this study needs to be understood by taking these students' background into consideration. These Chinese international students came to Canada to pursue a post-secondary degree, which they could get easily or had already got in China. They had high expectations to truly learn in Canada (see the section on "Practical Learning" for the detail support). Also, studying abroad was their personal decision, so the causation of their study was internal. Under these premises, getting high course grades might be viewed as personal goals for these students. Additionally, for students whose first language is not English, being able to get good course grades in English can also be a reflection of students' high competence (at least in English proficiency). Thus for these students, the informing function in one test was much more evident than its controlling function – the course grades were informing their own competence. Therefore, these students' motivation and learning were prompted instead of being decreased when they studied for tests.

Pressure From Tuition Fees

In this study, even though the student participants were financially secure – they were fully supported by their families – the pressure from the high tuition fees of the Canadian university still gave them pressure and this pressure motivated them to study. Seven students mentioned this pressure. For example, Mei said:

> [Except the pressure of course work], there is another reason that I study hard and actively in Canada – The tuition fee here is higher than that of China. Hmm, so the pressure is higher.... I sense I have stronger motivation for learning here, because only when there is pressure, there is motivation.

The high cost of learning in Canada added weight to the value of the study opportunity and studying became more important for students. For example, Guan participated more in the learning activities: he attended every class he took because "I have paid so much money". Xian perceived a responsibility to study well because of the

high tuition fees, as she said, "I am responsible for my money. Because every course is very expensive, I must study well." For Yan, the high cost of learning not only made her study harder but also triggered her to consider the meaning of her learning to some degrees: when Yan reflected on why she started to study for her future in Canada and she didn't do this before, one of the reasons she mentioned was the tuition fees. She said she started to think about her future because "the tuition fees are too expensive here". One possible explanation for Yan's change can be drawn from Dewey's (1913) ideas of the difficulties in learning – difficulties trigger learners to study with consciousness. The high cost of study caused Yan a kind of difficulty that brought forth the results of her behaviors into consciousness, thus she started to think about the meaning and the purpose of her learning.

Superficially, student data indicates that financial pressure affected student motivation positively. But, this function might be actually related to the students' parents' expectations for students, as Hua's data tells us:

> Just because of the relative higher pressure I felt in Canada, say, so much money, and also so much hope of my parents' here, so there is pressure for my study. Motivation can only be produced when pressure exists, then it motivates me to study hard. I study much harder than I used to do when I was in China.

Clearly, the financial pressure that Hua perceived was reflecting the pressure from her families. Similar to Hua, many other students also expressed the idea that since their parents were spending so much money for their study in Canada, if they didn't study well they were letting their parents down, so they studied hard in Canada. The following data from Ping is one typical example:

> Q: When do you want to study?
>
> Every time after I called my mum I wanted to study, because I could feel pressure. I think my parents need to spend so much money. Although they don't force me to study, I myself want to study.

So, it is actually parents' expectations involved in their financial support that motivated students to study. Although these students' parents also supported their post-secondary study in China, the cost was rather low. The high cost of study in Canada made parents' expectations more perceivable to students.

This phenomenon – Chinese students motivated by their parents' expectations – needs to be understood by taking students' cultural background into consideration. In Asian culture, family as a whole is more important than any individual family member. "Individual family members feel a strong sense of obligation to the family as a whole and a commitment to maintaining family well-being.... personal accomplishment is interpreted as family achievement" (Kim, Atkinson & Umemoto, 2001, p.577). Thus parents have a duty to support their children's study and children have a duty to achieve academic success to honour their families. If a student gives a poor academic performance, the whole family of the student loses face. When parents' financial support increases as the tuition fee increases, the obligation involved in parents' financial support becomes more perceivable, thus bringing students much pressure.

In summary, students perceived that the financial pressure positively motivated them to study hard in Canada. The reasons of the positive effects of financial pressure included: (1) the high monetary cost increased the value of the academic goal and/or triggered students to be more responsible for their behaviours; (2) the monetary pressure was a reflection of families' expectations, which actually motivated students to study.

Pressure From Other Learners

The other learners in the students' environment influenced students' motivation. Eight students mentioned other people's influence in their motivation and learning: they were affected by their friends, peers, or other learners in their environment. For example, Guan said he wanted to study when he saw his friends were studying hard. Tian said that because of seeing a lot of people studying in the library through the term in the University of Victoria, he was motivated to study hard.

According to the students' words, other learners' learning behaviors formed a learning ethos. When students sensed other learners working hard, they viewed the learning ethos as good and they were motivated to study. Otherwise, when a lot of learners didn't study, the learning ethos was bad and students were demotivated to study. For instance, Xian reported she studied very hard in China, as in her Chinese university many students were diligent; Hua said, "In China my classmates didn't study, so I didn't study either". Moreover, one of Hua, Ping, and Tian's reasons for coming to Canada was

that they wanted to study in a university with a good learning ethos. Tian directly tied a good learning ethos to the development and maintenance of his motivation. He perceived a positive and hard working learning ethos was very necessary to motivate and maintain his learning:

> There were such people who were very active and hardworking in my Chinese university too. They were students in the third or fourth years preparing for GRE. They worked so hard that I wanted to learn from them.... A positive group can give you motivation. Sometimes, your own motivation does not last long, or you relax, if there is no such kind of group, once you relax then you are so loose that you cannot keep on studying.

From Xian's, Hua's, Ping's, and Tian's data, it's clear that other learners' behaviors greatly influenced students' motivation.

Students perceived a pressure from a good learning ethos and this pressure affected their motivation positively. For example, Kong reported he studied hard in an ESL program, which helped students to prepare for the English test required for admission to the University of Victoria, because there was pressure in that program:

> One academic pressure was from myself – I wanted to get in the university. Another academic pressure was from the environment. Here generally students wanted to get in the university. They all studied hard. Then when you are in such a serious environment, you cannot be loose; you cannot appear that you are not here to study.

Particularly, some students mentioned they perceived pressure for learning from others through peer competition. But, peer competition had different effects on different students. Xian and Fang were hard working students; both of their Chinese universities were very famous in China and the peer competition in them was very high – students' final scores were always ranked and shown in public. This peer competition brought high pressure for both Xian and Fang. However, their opinions about this kind of pressure were totally different. Xian was the only student who strongly emphasized the need for this kind of visible peer competition. In her view, it elicited a good learning ethos that helped students self-discipline, kept students studying, and prevented them from decadence:

> I think the Chinese education exceeds the Canadian one because of the learning ethos – the consciousness of competition, as from our early school life we had already been ranked in school and everybody competed with other people. But here in Canada there is no competition. Only in the general term, the learning environment in Canadian universities is better than that of Chinese universities.
>
> Q: Do you mean that your study will suffer if there is not this consciousness of competition?
>
> Yes, because we have got used to this kind of competition, then if we suddenly relax and we have money at hand, we will easily become corrupt.

Obviously, Xian believed that the peer competition acted as a necessary external restriction for Chinese students' discipline and they have got used to it. In contrast, although Fang was used to this kind of competition too, she disliked it. One of her reasons for pursuing international study was to avoid acute peer competition. She said:

> I think this kind of competition is not good. Studying was so stressful. Normally I would say I was competing with myself; I studied for the sake of study. But, I could feel an invisible pressure. That is, I felt that I only studied for a reasonable rank in the class; otherwise I felt I failed my parents and myself. I felt this pressure was too high. Maybe other students didn't have this feeling. But I had felt like that since middle school – I always struggled to be one of the top three students, same in the university. I felt tied.

Clearly, the difference existing in Xian and Fang's perceptions of peer competition suggests that pressure is an individual factor – the same pressure has different effects on different students and different students prefer different kinds of pressure. This point is further extended by Guan's data. His words in the following quote suggests that different students also have different thresholds of pressure:

> Yes, other people can influence me. But, you need to see what the level of my ability is. I didn't put in effort to study in high school. Even though [now] I want to compete with other students, I am not capable to do so. Now if you let me, a person who didn't study hard in the high school, go to Qinghua University [which has the highest reputation in China], you are sending me there to suffer. You cannot let me perceive the atmosphere [which is acutely competitive]. That will

be a torture. If the pressure that one perceives is too high, one might commit suicide.

All student data about competition suggests that what kind of pressure and how much pressure a student really needs depend on his or her personal context; and if the pressure of learning that students perceive is too high, they will feel too stressed to enjoy studying or study well (The negative effects of stress are elaborated in the section on "Comfortable Learning"). The key point about pressure is to find the right amount of pressure that is suitable for each individual, as Tian said:

> Still, it's better to have some pressure, but if the pressure is too big it's not good either. This is a contradiction, and the problem is how to maintain the balance.

Part 2: Why Did Chinese Students Need Pressure for Learning?

There are three reasons why Chinese students needed pressure for learning. The first one is related to students' educational history; the second one is associated with students' need for challenge; and the third one is tied to students' need for self-control. All three reasons are suggested by student data.

First, Chinese students needed pressure because it was relevant to their educational history. Normally, because of the acute competition in the Chinese national university entrance exam, the pressure for learning in high schools was extremely high, while the pressure for learning in Chinese universities was comparatively low. In this study, five students acknowledged the high contrast between the pressure of learning at their high schools and their universities. One student (Ping) directly attributed her Chinese classmates' and her lack of effort in her Chinese university to this high contrast of pressure for learning. Ping perceived that, when transferred from a high-pressure environment to a low-pressure environment, students easily became slack. She said:

> From high school to university, the first year in the university was very relaxing. This might reflect a pitfall of the Chinese education system. At the high school level, the pressure of learning was extremely high. Once one was in university, one could relax immediately. Then one became very lazy and was not willing to study. Also, we thought we had already over studied before, [so] even reading books was disgusting. Play was better.

In contrast, students who studied in a university having a similar pressure for learning as that at their high schools kept on studying hard. For example, Xian studied harder in her Chinese university than she did in high school because of the high peer competition in the university. Similarly, Fang reported that the peer competition in her Chinese university was extremely high and it pushed her to study hard in some ways. So, student data suggested that according to these Chinese students' educational history, an appropriate pressure for learning was suitable and necessary for them in university, to help them transfer from high school to university.

Second, students needed pressure because they wanted challenge, not easy tasks in their study. The data in the first part of this section have shown that students had low interest in their study when there was no pressure and they put in low effort. Although easy tasks made success easy, students didn't appreciate them. Conversely, although most students said the pressure for learning in Canada was higher than in China, they gave it positive comments instead of negative ones. This phenomenon reveals that students wanted to be challenged by school, thus they could learn as much as they should and their future could benefit. Guan's following data makes this point clearer. Guan didn't like to write things. But if teachers don't ask him to write, he said:

> I will not appreciate these teachers. I think they don't help me grow.... Although you want to be lazy inside your heart, you don't want teachers to indulge your laziness. If you are still five or six years old and someone lets you do things that you know are bad, you might think the person is good to you. But if you are twenty years old, you don't want people to allow you to do things that are bad.

Apparently, Guan's data suggests that university students are mature enough to be willing to sustain temporary unpleasantness in order to pursue what really benefits their development, and they want teachers to help them by giving them challenges so that their existing experience can benefit their future. According to Dewey (1938), teachers have a duty to push or challenge students to make students' learning experiences educative rather than mis-educative, which "has the effect of arresting or distorting the growth of further experience" (p. 25). Dewey said,

> It is his [- a teacher's-] business to arrange for the kind of experience which, while they do not repel the student, but rather engage his activities are, nevertheless,

> more than immediately enjoyable since they promote having desirable future experiences.... the central problem of an education based upon experience is to select the kind of present experiences that live fruitfully and creatively in subsequent experiences. (p. 27-28)

Third, Chinese students needed pressure to help them self-discipline. As explained before in the first part, Tian, Ping, Yang, and Hua didn't study in their Chinese universities because there was not enough pressure for learning there, whereas they studied hard in Canada because of greater pressure for learning. It suggests that the pressure for learning helped students self-discipline. This idea is supported clearly by Xian's data. Xian used to be a hardworking student in her Chinese university. When she came to Canada, she found it difficult to discipline herself. She slacked for one semester and then regretted her behavior. Xian's reflections revealed that it was the loss of pressure for learning that caused her problem in self-discipline:

> I have slacked during one semester in Canada. There was no pressure for me to study.... Although I felt very cozy at that time, I didn't feel great. I could have asked myself to study more. But, if there is no pressure, I will not do that. I will just play.

Clearly, Xian recognized the pressure for study was a necessary external stimulus to urge her to self-control and self-discipline better, thus enabling her to study. This positive effect of pressure in Xian's self-discipline and study is showed more clearly in Xian's following comments:

> Q: What do you mean there is not enough pressure in Canada?
>
> No one supervises you [in Canada]. At weekend, when I was in China, if I didn't study but my roommates did, I would study too. Here I have only one roommate and she always plays. Also nobody to compete – here the teachers don't rank students and announce students' grades publicly, so there is no reference for competition in the study.... The competitive feeling is not as good as the one in my Chinese university.
>
> Q: So you need pressure of competition to motivate you to study?
>
> Yes.... In that situation [- nobody supervises and no peer competition], it's not easy to control myself.

Xian's difficulties in self-control or self-discipline in Canada can be understood in the following way. Chinese students who have studied in an environment in which there are a lot of external controls – there is always pressure from teachers and parents who are supervising them, and pressure from peer competition – lack enough practice in self-control or self-discipline. Therefore when Chinese students move to a learning environment where there is nobody monitoring their work and no peer competition, where higher autonomy is given and higher self-control is required, they will have difficulties in disciplining themselves. Also, the difficulty of self-control can increase when these young students are far away from their families and they need to be in charge of a large amount of money (for tuition fee and living costs) by themselves for the first time. Chinese students differ from western students in that normally they don't get training in managing financial affairs as they usually just get money from their parents. Therefore, to young Chinese students, who are still not mature enough, pressure for learning is needed as it can act as an external restriction, which can prompt responsibility and self-control.

Section 4: Comfortable Learning

Comfortable is translated from students' words – "qingsong" and "shufu". Qingsong means relaxed, comfy, at ease, easy, free from anxiety or stress. Shufu means comfortable. In this study, students showed a preference for learning in which they feel comfortable. Different students felt comfortable in different situations, such as when they had more choices in their learning content and methods, when there was less restriction in the school, when their learning was more convenient, when they had more opportunities to be evaluated, and they were free from acute peer competition so that learning was not stressful. In this section, students' perceptions about comfortable learning are organized into four parts: "more choices", "less restriction", "more convenient", and "less stressful".

Part 1: More Choices

Students asked for choices in what they were to learn, including their majors, courses, and assignments; and how they would learn, including the selection of times, course load, instructors, and references. Students perceived that giving them choices over their learning content and methods enabled them to adjust their study closer to what they needed or preferred, thus their motivation and learning could benefit.

Choices in Learning Content

Major. Five students talked about having choices regarding their majors. They viewed the provision of choices as a way to make learning match their needs and interests. For example, Kong thought giving students a choice to change majors offered students, who find their majors don't fit their personality or personal situations, an opportunity to change:

> Many students want to study computer science. But some will find out the major is not suitable for them after they get to study it. If they can change their majors, then, there is a kind of flexibility existing.

Ping sensed that having a choice to switch majors in university enabled students to adjust their study based on the development of their interests or needs in future employment:

> I think allowing students to select or change their majors is very flexible. After I finish the first and the second year, I can consider the social situation, or think about what will be more suitable for me to learn in order to get a job, or which major I really like. Then I can decide on my major. I think it's not late at all. I think it's better for a person's development.... For example in China you start to learn computer science, you think it is a popular major. But after you finish a four-year degree, the job market might already be saturated. But here you only need to predict the job market two years ahead. You can predict the future better.

Xian gave an example of her former classmate who had to study a major that s/he didn't like in a Chinese university. She said the student could not switch the major because of the restrictions in that university thus s/he was very depressed. Xian commented this kind of study "only wastes time". Obviously, Xian didn't value studying something that was not self-selected.

The above student data indicated that students wanted to make their learning relevant to themselves – relevant to their interests and needs. Meanwhile, they thought their interests and needs were dynamic. Students perceived a flexible education system, which gives them a chance to choose and switch their majors, enabled them to make the most benefit from their study.

Courses. All students liked to select courses by themselves. Students perceived that having choices over courses gave them more autonomy and made the curriculum flexible to their personal needs, thus learning was more interesting. Here is an example:

> Q: Where do you sense the flexibility in Canadian education?
>
> Fang: The elective courses.
>
> Kong: Because the more choices we have, the more active we will be.
>
> Tian: Elective courses enable you to pick up courses that are most interesting for you within those courses that are practical for you. Therefore learning is both interesting and practical for you at the same time.

Clearly, Kong believed having choices over courses increased students' initiative in their study; Tian believed elective courses allow students' personal interests and needs to be involved in their study, thus their interest in learning was optimized. In short, students' words indicate that these students perceived a flexible curriculum as the one in

which learning can be personalized and suggest that students liked to have self-control and relevance in their learning. This statement is further supported by two students' words as follows.

Mei liked to have choices over courses, as she could organize her study in her own way and she felt more interested in learning something that was self-selected:

> Here [in Canada] it is your decision what courses you take. If I don't want to take a course this term, I can take it next term. In China, what courses you can take were set.... I think it's better to select courses by myself.... I am more interested in taking the courses that are my own choices.

Ping liked to have choices over courses so she could select courses that were interesting or useful to her, and her motivation and learning were enhanced when learning was interesting:

> The good thing here [in Canada] is that the curriculum is flexible. You can choose some courses that are useful for your future employment or that you like. When you are interested in what you learn, you are willing to study. That is, it improves your volition to learn, and it will make you learn better.

Clearly, student data indicates that students perceived that having choices over their courses enhanced their motivation and learning.

A unique piece of data from Fang suggests that giving students choices in courses not only invites students' existing interests to support their study, but also gives room for students to develop interests in what they learn. Fang described how elective courses facilitated her interest in Economics (Fang's major) as follows:

> Actually, was I really very interested in Economics? I will not say so. My interest was developed through the learning process. I sense, maybe when I was in China, the environment didn't provide me with opportunities to develop my interests. They selected all the courses for me. I didn't have choices other than to study the courses well.... In China, I just hoped I did the exams well. Here [in Canada] I also hope I can do the tests well. But, I think it's not the ultimate goal. Now I will choose the courses where I can really learn something.... In China many students chose popular majors. But, were they really interested in the courses in those majors? I don't think so. Many of them did that because [they thought] they could

> find a job more easily if they take those courses. But here [in Canada] a lot of Canadian students who take the same course with you are really interested in that course. You will feel that you are studying with a big group of people who are very interested in that course.
>
> Q: You mean this also benefits the development of your interest in the course?
>
> Yes.... They really study what interests them. I feel very comfortable studying with this kind of student.

Apparently, Fang's interest in her major was developed through interactions between her and her environment. Firstly, choices over courses enabled Fang to at least select courses that had the most relevance to her personal needs, no matter whether she was really interested in them or not. This relevance gave Fang a positive feeling towards the courses, thus enabling Fang's interest in the courses to have a chance to develop. Secondly, having a choice of courses led her into a group in which there were fellow students having real interest in the subject matter. These students' enthusiasm about the subject matter might positively influence Fang's attitude towards the subject matter. Fang's interest in her major might still be situational interest, which according to Krapp, Hidi, and Renninger (1992), refers to the interest that is generated primarily by certain conditions and/or concrete objects in the environment and often has only a short-term effect. But situational interest may have a more permanent effect and serve as the basis for the emergence of individual interests, which are stable personal dispositions (Krapp, Hidi & Renninger, 1992). So, the understanding of how the choices over courses helped Fang develop her interest is important. Fang's example suggests the importance of self-initiation in the development of one's interest.

Assignments. The benefit of having choices over assignments is suggested by a unique data source. When Tian explained what he liked about the writing assignments in an economic course, he said:

> At the very beginning to write a paper was very painful. Later the teacher allowed us to select topics that were personally interesting. I was more active when I was interested in the topic that I wrote. Because I was interested in the topic, I was more interested in what I found when I was looking for references.

Clearly, having choices over assignments increased Tian's willingness to take the initiative in his study and his engagement in the learning process. This example suggests that relevance and self-control were very important for student motivation and learning. Moreover, it suggests that allowing students to have personal choices over assignments could make learning tasks, which are difficult or not very interesting for students, sustainable or even enjoyable. In other words, it could improve students' willingness to do the tasks thus enhancing learning.

Choices in Learning Methods

Five students mentioned their needs or preferences about the choices in learning methods. They wanted to choose timing, course load, instructors, or references by themselves.

Timing. Ping perceived that having choices in timing enabled her to make better use of her time, improve her learning efficiency, and increase her autonomy:

> Another thing that I like in Canada is that the timing is very flexible. For instance these courses, if they have many sections at different times, if I think, oops, I don't want to study during this time period. And I want to study at night – I think I am more efficient while studying at night – I can arrange my classes at nighttime if it is possible. In this way, learning is more convenient and also efficient for me.... I feel I have more autonomy in this way.

Course load. Ding associated having students decide their course load with freedom, which could improve his motivation. When Ding was asked how school could increase his motivation, he said:

> School can do something like here [in Canada] – three semesters a year, you learn when you want; you take courses if you want. If not, you don't need to. Quite free.... Also, you can take any number of courses per term.

Instructors. Tian believed having choices over instructors enabled students to select the instructor whose pedagogy was more suitable to their learning styles:

> Maybe some students like to be spoon-fed; some like an open and flexible way, we should combine both teaching styles.... We offer students choices, and then we let them select by themselves.... Do not only provide students with one

> teaching style, for example, an enthusiastic one. Otherwise, if some students don't like this teaching style, then they don't have choice.

References. Xian hoped teachers can provide students with varied references which can help students in different ways, thus she can have choices over references based on her need:

> I hope teachers give us references that have more exercises.... [Because] to prepare for the tests, we want to practice more and do more exercises, thus we can have deeper understanding.... Also, of course you want to learn more in some courses that you like or can help you to find a Co-op job easier... Yes [, at least teachers need to provide students these opportunities.] It's one thing whether we read the references or not. But, do you give us these opportunities?

Xian was asking for references that could guide her to learn deeper, not just broader. Xian's request can be easily understood when we connect her words with her educational background – in her Chinese university, teachers gave students a lot of exercises throughout the term and there were many references for these exercises in the university library. Xian was asking for an education that was relevant for her. But, the key point in Xian's words is that teachers need to give students choices.

Part 2: Less Restriction

Students disliked strict discipline, especially in their thought and personal lives. The three major restrictions that students mentioned in this study include attendance checks, excessive compulsory school activities, and school rules.

Attendance Checks

Six students mentioned the attendance checks and they disagreed with the use of them to force students to attend class. Attendance checks made students feel controlled. For example, Fang disliked the attendance checks in her Chinese university. She viewed attendance checks as a reflection of teachers' high authority, control, and distrust of students. This negative impression brought about by the attendance check demotivated her to participate in class. Fang said:

> I feel the attendance checks [in China] are very bureaucratic. I don't have this feeling here [in Canada]. Here teachers are not higher authorities. Then s/he trusts

> me very much. S/he doesn't check attendance. S/he thinks I will attend class if I want to, because it is my own business. Then, what happens? So-called freedom includes something in human consciousness. If I have already got this impression that teachers will check attendance every class, ask students to answer questions and spot test students in class, then I get an impression that I am controlled.... You can express your opinions in China too. But because I had already got this strong impression in my mind that I was controlled, then I felt that I didn't want to express my opinions.

Kong's words further indicate that students perceived that the attendance checks decreased students' willingness to attend class. Kong said, when students were forced to attend classes, they might undergo "reverse psychology (nifan xinli)" – that is they didn't want to do something just because they were forced to do.

Also, a few students perceived that attendance checks didn't help their learning. For example, Yan said:

> Sometimes I attended a class because of the attendance checks, but I didn't listen at all. Then why should I waste my time in this way? I can use it to do other things.

Yan's words suggest that if students don't identify with the meaning of the classes, they don't study even though they attend classes. In this situation attending class is just, as Kong said, "formalistic".

A few students' data implies that when class attendance was not compulsory, students' willingness to attend or participate in class could increase. For instance, Fang said:

> When attendance is not compulsory I feel that attending class is not my responsibility any more. This way is more relaxed – feeling like I am attending a party [as attending a party is not compulsory either].

Kong reported that he was willing to attend class and he learned better when attending class was voluntary and there was appropriate pressure for learning. When asked, "Based on what did you think you learned better in Canada?" he answered:

> One thing is you don't want to be kicked out [for poor grades], so you will study and search hard for learning materials. Another thing is there are no attendance checks, thus you will attend class voluntarily to find out what you still don't know.

Kong's answer indicated clearly that his motivation increased when there was no attendance check but there was a pressure for learning. It seems as if he didn't answer the question. However, based on Chinese students' belief – one can learn well as long as one wants to learn (this has been discussed in the section on "Practical Learning"), so the reasons that make students learn well are the same reasons that can motivate students. Therefore, Kong's data suggests that when attendance checks are voluntary both student motivation and learning can benefit.

In summary, students perceived attendance checks could not motivate and facilitate their learning. In contrast, they might do harm to motivation and learning because they made students feel disrespected and controlled.

Excessive Compulsory School Activities

One student (Xian) reported that in her Chinese university there were many compulsory school activities that students had to attend, such as rehearsals of art performances, varied competitions, student associations' activities, teachers' reports, and political studies. Xian commented that these excessive compulsory school activities did harm to her learning as they occupied her study time:

> Because of the compulsory activities we always needed to find time to study what we wanted to learn. It was not as if you could study as long as you wanted. It's a different story here [in Canada]. You almost don't need to care about anything. You can study as long as you want.

Xian was against the excessive school activities, not all the school activities. Actually she complained that there were not enough school activities in Canada:

> I think the right amount of school activities is good for everyone. For example, sport competition, art performance, and competition, those activities organized by the institution. You get to practice some skills by doing them. Here [in Canada], there are not many school activities. Or say, you need to find them by yourself. Thus I sense the opportunity to participate in a school activity is much lower than

> what I had in China. [Therefore] sometimes I feel my life is so boring. One cannot always just study; one has to do other things for a change.

Clearly, Xian perceived that school activities were necessary for students as they made student life more interesting and offered them opportunities to improve some abilities, but too many school activities made student learning suffer. Pushing students to attend school activities can be a way to increase student involvement in school. According to Astin's (1985) involvement theory, student involvement is the cornerstone of student achievement. The more time and energy students devote to school activities, the more they would benefit. But, the involvement theory also explicitly acknowledges that students' time and energy are finite (Astin, 1985). If students spend too much time and energy in some school activities, then they lack time and energy to do other activities that might be also needed by their educational programs or they just don't have time to reflect on what they have learned in the school. Moreover, when the school activities that students attend are compulsory, not only does student learning suffer, but also the quality of student involvement decreases, as students might feel controlled and restricted when they are forced to do something that they don't like to do. This has been shown in students' perceptions of attendance checks and also agrees with Kuh's (1995) interpretation of Astin's involvement theory. Kuh says one of the propositions in Astin's theory is:

> The effectiveness of any educational policy or practice is related to the extent to which it encourages students to take initiative and become actively engaged in the activity. (p. 126)

So, Xian's opinions of school activities suggest that an appropriate amount of school activities is important, especially when the school activities are compulsory.

Excessive School Rules

Four students mentioned that they disliked excessive school rules, especially those controlling their personal lives and thoughts, such as their political opinions, lives in dormitories on campus, romantic relationships, and so on. For example, Tian said,

> There was a counsellor[5] who always called you to his or her office, talked with you about your lives and political thoughts. Although it was not surveillance, I sensed it was too restricted.

Students thought the school rules regarding students' personal lives, especially their romantic relationships, were not suitable for their age level. For example, Tian said,

> In my ideal education, schools would not impose so much restriction upon the students, like the rigid way in China. When I was in the second year, one of the school regulations said that female and male students were not allowed to be hand in hand on campus. We were university students, not high school students.... They supervised too much.... School should control basic things, like criminal behaviors and drug use etc.

A few students in a group interview also commented that the restrictions about the romantic relationships in their Chinese universities were "ridiculous for adults". Apparently, students could distinguish which school rules were necessary and which were not. The strict discipline in students' personal lives made students feel disrespected and controlled, thus perceiving their school and education negatively.

Students perceived that the restrictions on their thoughts not only gave them a negative feeling of control, but also did harm to their personal growth. Two students' data indicates it. Fang thought the restriction on her thoughts inhibited her critical thinking ability from developing:

> I sense the education I got in China cheated me in some ways. I mean it was not open enough – what we learned was very limited. For example, we just heard the positive comments about the Communist Party.... Opinions were merely taught. I didn't feel I had my own opinions.... For instance, to answer one question in the national entrance exam, I just needed to copy what teachers told me. That was not my own opinion at all. I should say that's the Communist Party's opinion.... In Canada I learned, gradually, to think for myself. Of course teachers will give you some tips, some objective things, some standards, but the subjective things you need to develop by yourself.... In China we were used to analyzing problems in one way – we already formed a habit – we would not analyze the problems from another perspective.... But here [in Canada], I have access to many different

> opinions. For example in biology classes, one theory that is similar to Darwinism was seldom mentioned in China. Here the teachers will say, "I agree with this" and "I disagree with that". They seldom say this is right, that is wrong. I think if teachers tell me that something is wrong then I don't need to do more research on it. I will only think about the right one, not the wrong one.

Clearly, when Fang was only taught or given access to one sort of thought and/or theory, she had no chance to practice critical thinking ability, as there were no other thoughts with which to compare or from which to distinguish. Also, teachers' judgments of rightness or wrongness of one kind of thought stopped or ended her thinking, as Fang said – there was no need for her to do more research on the opinion that had been sentenced to wrongness. Gradually, she could lose her ability to form her own opinions. In contrast, when she was able to access different thoughts and there were less restrictions on her thought, her independent critical thinking ability developed. Fang's data suggests that students need to listen to different voices to develop the ability to think. This accords with what Bateson (1979/2002) says: it is the difference that triggers one's mind to work. That is, to enable one's mind to function, there needs to be some difference between two or more than two different ideas.

Similarly, Tian became more critical after he was able to access different opinions in Canada. He said:

> I can understand the relativity of democracy.... I see difference; I start to agree with the Chinese Community Party to some degree.... There is only negative news about China in CNN. Their democracy is relative too. What they do is for their nation's benefits. They have their bias too.

Tian believed allowing diverse thoughts to co-exist in the university formed a free and open academic ethos that can cultivate a master (dashi), which refers to a person who is a leading expert in one field and has deep thinking in Chinese. He used a famous Chinese educator Cai Yuanpei's[6] ideas and how he made Beijing University prominent in China to support his opinion:

> In my ideal, school would be free and open. Like Cai Yuanpei says, let numerous different opinions be expressed (bai jia qi fang) and debated together (bai jia zheng ming). I sense that Beijing University in the 1920s and 1930s had more

> depth than the one at present. Why does not masters appear in the present but before? It's not that the Chinese education system is not good.... I sense in the 1920s and 1930s, the academic ethos [in Beijing University] was more open than now.... Now I sense our thought is confined.

Evidently, similar to Fang, Tian believed it was the freethinking that cultivated the flourish of thoughts.

Unique Factor

A piece of data is worth being mentioned here because it indicates that students' perceptions of freedom or control could be influenced by the whole school environment instead of any individual class. Fang stated that it was not one particular class in China that brought her a feeling of being controlled. It was the bureaucratic atmosphere spreading in the Chinese university as a whole that made her feel controlled no matter where she was. She said:

> For example those offices, you could feel the bureaucracy immediately once you walked in.... I think it was not the class that really gave you a feeling of being controlled and made you uncomfortable. It was because you always lived in that kind of environment, you will feel, you can perceive the bureaucracy in it.

Fang's data suggests that any negative experiences from any parts of the school can potentially influence students' perceptions of other parts of the school. But, this finding also positively suggests that everyone in the school can contribute to students' positive perceptions of the whole school system.

In summary, student data indicates that students viewed the attendance check, excessive compulsory school activities, and school rules as unnecessary restrictions, which didn't benefit their motivation, learning and/or personal growth, and made them feel controlled and disrespected.

Part 3: More Convenient

Six students perceived that when learning was more convenient, when they could learn more by spending less time and effort, they felt comfortable. Different students mentioned different factors that made their learning convenient, including multiple

instructional tools, multi-channels for help, rich reference resources, and a good physical learning area.

Multiple Instruction Tools

Multiple instructional tools were referred to as ways to benefit motivation and learning by three students. Ping perceived that multi-media in teaching made learning contents easier to be remembered and understood. When Ping talked about her ideal education, she mentioned that a class she liked used some movies to help students learn. She said, "I like teachers to use multi-media in teaching to help students understand or give them stronger impressions." Yan emphasized that visual instruction tools helped her remember learning materials and made learning more interesting and comfortable:

> Those pictures teachers show in class appeal to you visually and give you sensory pleasures, thus you can remember some contents. It's better than pure talking. Pure talking is very dry and boring.

Fang thought employing multiple instruction tools to teach made class more interesting. When Fang was asked what factors contributed to the class atmosphere that could attract her and also help to facilitate her learning, she mentioned multiple instruction tools:

> I think the medium of instruction has an impact upon students as well. Actually to teach is to give a presentation. They are not much different. Whether a teacher teaches well or not depends on how good his or her presentations skill is. So, on the one hand they need to know their materials; they need to know what they are going to talk about. On the other hand, their methods are important. They don't have to talk in different tones or volumes, but I think they need to use different tools. For example they will not just write notes on the blackboard, or just use slide or something else.... In China teachers only sit in front of students, and wrote some notes on the blackboard, I think this kind of presentation is sort of boring... It's like you will feel that watching TV is more interesting than listening to the radio. TV has images and sound.

Apparently, Fang could distinguish teaching from simple presentation. She perceived that teaching was not a show; two major tasks of teaching were to catch students' attentions and make them understand. Fang believed that using multiple instructional tools in one

class made learning more interesting and easier for her. As such, her engagement in class increased and her learning was facilitated.

Fang's data suggests that teachers' presentation skills can affect student motivation and learning. This is supported by Gorham and Millette's (1997) study of teacher and student perceptions of sources of motivation and demotivation in college classes. In their study, students attributed their demotivation to teacher behaviors. One demotivator is a teacher's poor presentation skill. The benefit of using multiple instruction tools to teach for students' learning can find support from Gardner (1991). Gardner believes any topic that is worth learning can be approached in multiple different ways, such as narrational, logical-quantitative, foundational, esthetic, and experiential ways. Gardner also believes that students vary in the learning styles. He encouraged teachers to introduce new materials in multiple ways thus enabling more students to grasp the materials easier and develop multiple perspectives of the materials, therefore students can be able to think in more than one way. Gardner says, "Environments that can fuse sensorimotor and symbolic forms of knowing with the notational, conceptual, and epistemic forms of knowing valued in school should engender understanding" (p. 180). In other words, in Gardner's opinion, educators should not limit their ways of teaching to reading, writing, paper works, and other symbolic formats. Any format that can encourage students' emotion and sense get involved should be advocated.

Multi-channels to Get Help

Two students mentioned their preference of having multiple channels to get help from different resources. For example, Fang said she felt comfortable studying in Canada. Fang went on to explain why she felt that:

> I think here [in Canada] there is more help available for students. I can get help from many sources. There is a math tutoring center and a help center. Also, teachers post course notes on the website. In addition, teachers will give you some links related to the courses. You can look for information through them if you are interested. In China I could only get help through limited ways: I could only get help from teachers, or I brought some reference books and did some exercises. If I could not understand the exercises, I went to ask teachers. I feel it seemed like –

> of course I could ask classmates for help – I feel I had one single approach to study in China.... Here [in Canada] I will ask teachers questions too. But I feel that asking teachers questions is not the most important way to get help here, as I can get help through many approaches.

Apparently, having multiple channels to find assistance made Fang's learning easier. Thus she felt comfortable. Moreover, Fang perceived that when she had multiple ways to get help her motivation increased. When Fang was asked what extrinsic factors could help her intrinsic motivation develop, one of the factors she answered was "how much help I can get from teachers". She went on and explained that the help she talked about "is not necessarily a teacher's personal help. It is the services that I can access." Obviously, Fang valued more the help resources she could access by herself than the help she could get from a teacher. This suggests that students don't view themselves as passive learners, who just wait for teachers' help; students tend to be active and like to have control in their study – they prefer to look for help by themselves.

Rogers (1969) supports the notion of letting students seek help by themselves. He argues that to facilitate student learning, teachers, as resource themselves, contribute to the knowledge of the students by making themselves available to students, instead of imposing help on students. Rogers writes,

> He [- the teacher] makes himself and his special knowledge and experience clearly available to the students, but he does not impose himself on them. He outlines the particular ways in which he feels he is most competent, and they can call on him for anything he is able to give. But this is an offer of himself as a resource and the degree to which he is used is up to the students. (p.132)

Easy to Find References

Three students mentioned the difficulties to find references as one of the factors that did harm to their motivation and inhibited their learning, as their discussion in a group interview as follow makes this point clearer:

> Fang: Here [in Canada] study is less laborious than that in China.... I feel that I can easily find what I want here. But, in China – yes, I could find what I want too, but I needed to spend a lot of time. Quite often the result was

frustrating. Maybe you could not find it or you needed to use lots of time to find it...

Tian: I agree that in terms of looking for materials, references or other things, it is much easier here than in China.... This makes me feel comfortable. How time-consuming and energy-consuming it is if you spend a whole day looking for information.

Kong: The point is that this does harm to the motivation of learning.

Tian: Yes, it does, when you have spent one day looking for something but you cannot find it.

Kong: You don't want to look for it again later.

Tian: You will feel depressed. If you have the willpower, you might try again the next day, otherwise you will just give up. If you have the volition, you try again and you still cannot find it the next day, you might give up too.... The reason we give up is not because we have not tried. It's because we try but still cannot find it. This is what frustrates us.

This discussion indicates that students felt depressed and frustrated when they could not find academic references, especially after they spent a reasonable amount of time and effort. These negative feelings discouraged students to persist in their study. It is also possible that the difficulties of finding references harm student motivation and learning by inhibiting students from being productive, thus students cannot get feedback of their learning. Without feedback of their learning, students' motivation and learning suffer. So, providing students with rich learning resources and making them easily found or used, not only makes learning easier but is also necessary for sustaining student motivation for learning.

Rogers (1969) recognizes the importance of providing students rich learning resources and making them easily accessible. He wrote,

> When a teacher is concerned with the facilitation of learning rather than with the function of teaching, he organizes his time and efforts very differently than the conventional teacher.... he concentrates on providing all kinds of resources which will give his students experiential learning relevant to their needs. He also concentrates on making such resources clearly available, by thinking through and

> simplifying the practical and psychological steps which the student must go through in order to utilize the resources. (p.131)

Rogers argues that not every student will have the patience or interest to go through all kinds of difficulties to try to find their learning resources. Thus it is teachers' responsibility to help students to locate the resources more efficiently.

Good Physical Learning Environment

Six students mentioned their preference for a good physical learning environment, which has quiet libraries, ample individual learning space, rich and good learning facilities, bright and warm classrooms, big sports fields, clean washrooms and so on. Five out of these six students listed a good physical learning environment as one criterion of their ideal school. Students related a good physical environment to psychic comfort and time efficiency. For example, Tian said, "Good environment brings good mood." Kong said, "The better the facility is, the less effort we waste, the better we would feel." Obviously, a good physical learning environment with rich learning facilities made students feel comfortable and helped them save time and energy. Thus their motivation increased and their learning benefitted.

It is possible that some universities cannot provide enough learning facilities and space for all students because of their limited budgets and large number of students. However, some universities might still lack learning facilities even though they have enough funding. Two students complained that their Chinese universities didn't use the budget or their existing facilities well thus they didn't have enough learning facilities to use. Fang felt uncomfortable when her Chinese university invested too much money in offices instead of a library. She said:

> When I was in my Chinese university, the library was very big. There were 13 floors. But, in fact there were only two floors keeping books. Also, half of the reference books for economic study were textbooks.... Such a beautiful building, so many facilities, only two floors keeping books, the others were used as offices. I felt terrible about it at that time.

Tian complained that in his Chinese university a big grass field always was closed unless there were some big sports competitions, and the one and only computer lab was locked

until class time. This misuse of university facilities made Tian feel excluded from the university. He said:

> [In Canada] I sense I am one member of the school – basically you can use everything in the school. In China I didn't have this feeling. You tell me, the field is to show people or for people to use? …
>
> Q: So, you mean it doesn't matter that how many facilities you can use in school, the point is if you cannot use them, then you don't feel you are a member of the school, right?
>
> Yes, that's right.

Student data suggests that the misuse of school facilities and budgets could have a worse influence on students' perceived support from their learning environment than lack of facilities and budgets, as students might perceive school was not supporting or caring for them.

Part 4: Less Stressful

A few students mentioned that they felt stressed when the evaluation in a course was infrequent and when the peer competition was acute. Consequently, their motivation and learning suffered.

Evaluation

In total, five out of ten students mentioned they preferred to have regular evaluations through a term. Two students believed that regular evaluations brought consistent pressure of learning thus urging them to keep on studying. This has been discussed in the section on "Learning Under Pressure". The discussion in this part focuses on the three students who thought that regular evaluations gave them a feeling of fairness and flexibility, thus decreasing their stress. For example, Xian commented that if a course grade only depended on one evaluation, this way was "rigid (siban)", because a single evaluation could not reflect students' ability well, and it caused high pressure for evaluation. Xian said:

> For example, here [in Canada] 40% mark is allocated on the performance over the whole term and 60% for the final. So, there is not too much pressure on the final. Students – who are like me – who study well during normal study period can

> show their ability in the midterms.... If I don't perform well in the final, my mark is still good.... But the evaluation system in my Chinese university was rigid. That is, no matter how well I usually learned, my ability was only reflected through one exam. Many things can happen in the final, such as students might be nervous, they might have stage fright, they don't understand some parts of the knowledge, or there is something wrong with teachers' questions, and so on.

Xian also mentioned that she felt it was very unfair when students who just studied a short time before the final could get a mark as high as she did. In Xian's ideal education, the evaluation would be flexible – students would be evaluated by assignments and exams over the term. She said:

> The purpose of this kind of flexible evaluation is to urge students to study harder over the term and the students who study hard through the term can gain some advantages [that they deserve]. I like this way.

Obviously, Xian's data indicated that she perceived that regular evaluations gave recognition for hard working students, and urged students to study harder over the term, whereas infrequent evaluations actually punished students who worked hard over the term, especially when they didn't perform well at the point of evaluation.

Hua sensed it was better to use assignments instead of tests for evaluation, and also she would like to have many evaluations over the term. She believed that infrequent evaluation made one evaluation so important to the course grade that it stimulated students to develop a negative attitude towards evaluation and learning:

> I think it's better there is no test in university. Give us more assignments over the term. I think assignments can reflect students' ability well enough. I sense tests do harm to students a lot and it is not necessary.... I think the grades of many courses in Canada are based on one test, like the final. Many finals are worth 50% course mark. Its ratio is so high that I will want to do it well no matter how, even cheating.
>
> Q: So, you mean it is better to evaluate students based on their performance over the term?

> Yes, I think it is fairer. I think if you emphasize a lot on the finals then you don't study during the normal school days; you just study in the last few days before the finals, and you study hard desperately. This cannot benefit us either.

Obviously, Hua perceived infrequent evaluations made students so stressed that students had to do anything to protect them from failure, and they demotivated students from learning during the non-evaluation period thus the learning quality suffered. Hua thought regular evaluations scattered pressure of evaluations to different periods over the term and decreased the risk of every single evaluation, and consequently students felt less stressed.

The above student data indicates clearly that students perceived that regular evaluations made them more comfortable and benefitted their learning more than infrequent evaluations. The benefits of regular evaluations in learning can find support from Doll's (1993) perspectives of evaluation. Doll believes that to facilitate students' cognitive development, evaluation should be used as feedback, as the basis for future learning, as a beginning of dialogue between students and teachers instead of the demarcation point. It should be "part of the iterative process of doing-critiquing-doing-critiquing" (p. 174). Then, if evaluations are really used as feedback, they should be done regularly. Regular evaluations can bring students rich feedback of their learning over the term. This feedback informs students how well they are doing and where they should improve in their learning. Also, multiple feedback enables students to see how much progress they have already made by comparing two sets of feedback. Thus students' progress is emphasized and encouraged.

Peer Competition

Besides single evaluation, two students perceived the acute peer competition in their Chinese universities, which was brought by showing everyone's marks publicly, made them so stressed that their learning and motivation suffered. Fang viewed the stress caused by the high peer competition as an external control imposed by other people – she was forced to compete with other students and she disliked it. Fang said:

> When I have intrinsic motivation – that is I ask myself to do well, I don't want other people to give me more pressure. In China sometimes I was not sure

> whether I wanted to do that – to study well – because I myself wanted to do that, or I was forced by other people. But here [in Canada] I am very sure that it's me myself who wants to do that.... For the thing I want to do, I don't want to have other people push me.... I thought it was enough that I myself studied hard. Why did other people ask me to study hard? I don't know what the feeling was. I just felt uncomfortable.

Fang's data suggests that when peer competition was highly emphasized, students might attribute their behaviors to external control instead of internal control. Consequently students' intrinsic motivation and learning was inhibited because of the loss of self-control in their learning.

Hua believed that the stress caused by acute peer competition could easily hurt individual students' self-esteem as well as peer relationships. She said, when teachers showed every student's test scores in public, it "hurt students". She went on to say:

> If you really have not done the test well, this way would hurt your self-esteem really badly. Also, it might not be good to promote such kind of competition, as it can influence the peer relationship. Sometimes your classmates might want to do harm to you. For example, if two students have similar scores, one of them will want to exceed another student no matter how. Moreover, if a test score is too important for a student, s/he will cheat.... It's not right either.

Clearly, Hua perceived that the acute peer competition stimulated students to form a negative attitude towards each other, thus inhibiting peer cooperation and not enabling students to learn from each other. She also thought that the stress from the peer competition encouraged students to take shortcuts, such as cheating, in their study to overcome pressure. Obviously, such kind of learning experience is mis-educative as it distorts the growth of students' future experience and can jeopardize their entire future.

Students' dislike of acute peer competition doesn't mean that they reject peer competition. As when Fang was asked, "When learning is meaningful to you?" she answered, "When I can excel ahead of other people." Fang's words suggest that it might not be the competition that students disliked; it is the format of the competition they disagreed with. Students might like to compete with their peers when they chose to do that and the competition was fair. This can be supported by Xian's data. Xian is the only

student in this study that advocated peer competition strongly and she enjoyed it very much. According to Xian's description of her Chinese university, it seems that the acute peer competition for the scholarships in that university could motivate students to study hard and the reason of it was related to the design of the competition. First, students got credits from all kinds of academic and non-academic achievements in school, and the winners of the competition were selected based on the sum of credits. Xian said:

> The evaluation of scholarships in my Chinese university was based on academic grades and social activities in the university. For example, you got credits if you acted as a class monitor (banzhang) or a dormitory leader (qinshi zhang). Like our monitor, s/he was not good at study. But, s/he got really high credits because of her/his social activities.... The GPA was worth 60% in evaluation. You could also get credits by attending many kinds of school activities. For instance, playing soccer, 0.3 credit; taking role as a cadre in class (banganbu), 1 credit; leading in dormitory, 0.5 credit; attending sports competition, 0.5 credit. [Meanwhile,] if you didn't participate in morning exercise or later for classes you would lose credits.

Apparently, in Xian's university there were many ways for every student to win the competition for the scholarships. Students didn't have to compete with each other only within academic areas.

Second, the financial rewards of the competition were attractive for students as many of them were from poor families, but at the same time, students could receive enough financial support from other resources in the university. Xian said:

> The tuition fees in my Chinese university were very cheap [1000RMB – around 200 Canadian dollars per year], and also university provided a lot of scholarships, bursaries, and work-study opportunities.... The scholarships had many quotas.... 2% first year students could get admission scholarships.... 10 out of 34 students in my class got annual scholarships.... The students who were extremely poor could get student loans with 2% annual interest and they didn't need to repay their loans before graduation. [Also,] there were many classrooms in the university. The cleaning jobs for these classrooms were all filled by students living in poverty.

It is clear that students in Xian's univeristy could get what they really needed through the competition for scholarships, but they didn't have to do that – they could get it through many other ways. So, the competition in Xian's university was set in a way that students attended the competition voluntarily; the attendants of the competition competed with each other in multiple ways and had equal chances to win. Therefore the competition didn't control students. According to Deci (1975), rewards have two functions: one function is that they control, another function is that they provide information about students' competence. These two functions of rewards influence students' motivation: when the informational function of a reward is salient, intrinsic motivation is enhanced; but when the controlling function is salient it is not (Deci, 1975). So, when the controlling function of a competition with a reward is highlighted – for example, students receive respect from their peers only when they win the competition and get the reward, or what students need is set as a reward and students can only get it through one competition, the competition is negative to students' motivation, and consequently their learning.

In summary, students' data indicates that in students' perceptions the design of evaluation and competition could influence their motivation and learning. An unfair evaluation or competition – in which students have only one way to get a good mark and win – could bring students so much pressure that students' motivation and learning suffered.

Section 5: Active Learning

Although in this study, only four students directly expressed their preference of active (huoyue) classes and two student stated negative impacts of a lack of active interaction between Chinese students and local people, these students' data is so thought provoking that "active" is recorded as a theme. There are two parts in this section. The first part presents students' perceptions of active classes, the relationships between student-teacher interaction and active classes, and what factors could facilitate visible student-teacher interaction. The second part presents two unique sets of data about the interaction between students and local people.

Part 1: Student-Teacher Interaction and Active Classes

Students' comments about an active class suggest that it was through rich student-teacher interaction that a class became active. Different students emphasized different ways to interact with their teachers. These ways are categorized into two types: visible interaction and invisible interaction. In this study, visible interaction emphasizes the one initiated by students, including student questions and opinions. Invisible interaction is a silent communication between teachers and students' thought. It refers to the process when students are inspired by their teachers to think actively.

Visible Student-Teacher Interaction

Kong's data. One student (Kong) emphasized student questions and opinions in class and drew a direct relationship between student-teacher interaction and active learning. Kong defined an active class as an interactive one in which teachers encourage students to ask questions and express ideas:

> I sense here in Canada the class is more active.... The atmosphere of class feels active. Here the teachers will not encourage you particularly, but they will think out ways to stimulate you to ask questions.... Teachers here value students' ability to express personal opinions. They say, "No question is a stupid question".

Obviously, Kong viewed an active class as the one in which both teachers and students ask questions or express opinions – students in an active class are not passive acceptors; they proactively participate in the class by raising questions and expressing personal opinions.

Kong perceived that an active class benefitted motivation and learning. An active class increased Kong's willingness to participate in class. He said:

> If the class atmosphere is more active, I feel more willing to participate in class instead of just sitting and listening in the class, feeling sleepy.

Also, an active class atmosphere brought Kong a pressure for learning, which could be positive to his motivation. Kong said, by seeing other students asking questions in the classroom,

> I feel a kind of pressure. I feel that other students are always studying ahead of me.... If this pressure is not too high, it can motivate me to study. Pressure can turn into motivation.

Apparently, Kong perceived that the students who asked questions in class were students who had studied before class. As discussed in the section on "Learning Under Pressure", in this case, these students produced a good learning ethos motivating their fellow students.

Moreover, an active class helped Kong think and learn. According to Kong, if a teacher encouraged student questions or opinions in class, her or his style of teaching was "natural and casual". Kong liked this kind of teaching style because it made him "think and learn easier." Apparently, for Kong, interactive pedagogy made him feel comfortable thus optimizing his learning.

Furthermore, Kong believed allowing student questions in class improved student engagement. He said:

> Maybe influenced by the education system, Chinese students don't like to ask questions in class, whereas here students cannot wait to ask questions. Like in the Econ104, basically students read textbooks before class. Then when teachers talked about something that some students have questions about, they would raise a hand, and talked with the teachers for a while to solve their problems. I don't have this habit yet – I wait until teachers tell me the learning content, then I check if there is anything I still don't understand and try to figure them out. It's not like those students, who solve problems beforehand. Our learning habits are different, so our classes are different.... That is, the students who ask questions pay more

> attention in the class. In China, students just listened in the class, whereas here the class atmosphere is more active.

It seems Kong's words were about the different student engagement in class caused by the different learning habits. But, students' learning habits are influenced by the education system in some ways – students ask questions in class only when in-class questions are allowed. So, Kong's words imply that Kong believed that allowing students to ask questions in class encouraged students to prepare for the class beforehand, to attend class with purposes, and to pay attention in class, so that they could have their problems solved. In this way, student questions in class facilitated learning.

The relationship between student questions, class atmosphere, student motivation and learning is clarified in Kong's words about his ideal education:

> In my ideal, school needs to stimulate students to study. It needs to provide a kind of ethos. Not everybody is willing to study. School needs to motivate students to develop a willingness of learning.
>
> Q: What can school do to achieve it?
>
> Actually both in China and in Canada, students are required to learn independently. But what happened in the Chinese classes could not prompt a climate that motivated you to discuss. This resulted in less willingness to attend the classes. Here because you can find the answers of your questions from teachers, you will be willing to participate in the class. And then in class you will find a lot of knowledge that you think you have already mastered but actually not… School needs to stimulate students to be willing to attend class, not because they are forced to come by the attendance check.

Clearly, Kong's idea is twofold: (1) when students are allowed to ask questions in class they can use the class to serve their individual needs of learning, thus attending a class has personal value and relevance. Consequently, students' willingness to attend class increases, and students' engagement in class improves. (2) Once students are motivated to attend class voluntarily, more interactions between students and teachers can happen, therefore student motivation and learning can further improve. In short, Kong perceived the visible interactions between students and teachers motivated and facilitated students' learning.

Other students' data. Although the other three students – Tian, Fang, and Hua didn't mention how they perceived the relationship between visible student-teacher interactions and active class atmosphere, they expressed a need to express their opinions or ask teachers questions freely.

In Hua's ideal education, students have a good relationship with their teachers. Hua said, the benefit of a good student-teacher relationship for her learning is "When you have any ideas or problems [about your study] you can speak up directly."

Fang perceived that only when teachers and students respected each other, and student opinions were respected and valued, could students' learning benefit. When asked, "What methods or styles of teaching do you like? Why?" she answered:

> I hope there is more freedom in class.... Every time after I chatted with friends, I felt comfortable. I think attending a class is the same. Students and teachers are all participants of the class. Only when every participant respects each other, and has equal freedom to express his or her personal opinions, can both teachers and students benefit.

Tian suggested that not allowing students to ask questions in class was unacceptable, and teachers' disrespectful responses to student questions in class could demotivate student learning. He said:

> Some teachers said: "Don't interrupt my talk. Ask questions after class", when some students raised questions in class. After hearing this who would ask them after class? This way decreases students' motivation a lot.... all students in the class lost initiative. What does "interrupt teaching" mean? We don't know how we should ask questions. When should we ask if we don't ask in class?

In summary, all students' data in this part indicates clearly that students had needs to interact with teachers directly. Students perceived that visible student-teacher interaction helped their learning.

What Facilitates Visible Student-Teacher Interaction?

A few students' data indicates that in students' perceptions four factors could facilitate student-teacher interaction. These factors are teachers' attitudes, accessibility, methods, and language. Although students didn't draw direct relationships between these

factors and their meaningful learning, these factors contributed to students' meaningful learning by increasing student-teacher interaction and making students' learning active. Thus these four factors are worthy of explaining here.

Teachers' attitudes. Three students' data indicates that teachers' positive attitudes played a key role in motivating students to interact with teachers. Students preferred teachers who are non-judgmental, non- authoritarian, respectful, encouraging, and supportive.

Firstly, to encourage them to ask questions and express opinions, students perceived that teachers needed to be non-judgmental and non-authoritarian. The following example, which Kong used to explain how a teacher can encourage students to ask questions in the classroom, clarified the importance of teachers' non-judgmental attitudes in prompting student-teacher interaction:

> In Eco100 there was one time we discussed various unfair phenomena in the capitalist countries. The teacher asked us what we think about this phenomenon and what we can do to change it. Then one student proposed: "Let's change the country to a socialist one". Then what I found interesting was although everybody laughed, the teacher said socialism is good but we are not yet fully conditioned. S/he was not suppressing the student's opinion. S/he was discussing it with the student and s/he didn't mean your opinion was wrong and not acceptable. S/he just said: "From our points of view, whether there are other possibilities that are better?"

On the contrary, according to student data, teachers' judgemental attitudes could bring two negative consequences. One possibility is that students stop thinking – students don't want to bother to think about the idea that has already been sentenced to be "wrong" by teachers. This point has been discussed in the subsection on "Less Restriction". Teachers' authoritarian judgments can be a restriction for students' learning/thinking. Another possibility is that students might perceive teachers as authoritarian, trying to impose their opinions on the students. This is implied in Kong's following description of non-authoritarian teachers, who don't suppress students' opinions using teachers' authority:

> The teacher would not say "I am right; you are wrong." when they cannot convince the students. Sometimes if they think the question is difficult to answer, they will say, "This problem need more time to discuss. We can discuss it after class or in a break of the class."

Clearly, Kong perceived that non-authoritarian teachers would spend time discussing with students equally. The discussion process can show respect for students' thinking ability and emphasize the value of the process of thinking instead of its result.

Fang's data indicates that when students perceived teachers as authoritarian and thus not respectful, the student-teacher interaction was inhibited. Fang stated that she didn't want to express her opinions in Chinese classrooms because she had already got a strong impression that she was controlled (this has already been discussed clearly in the subsection on "Less Restriction").

Secondly, students' data suggests that students perceived that teachers' encouraging and supportive attitudes were very important to promote student-teacher interaction, because it takes courage to interact with teachers, especially in the classroom. For example, Fang said, expressing opinions in class caused pressure because it brought her a risk of losing face:

> There is pressure when I volunteer to answer questions.... If you answer well, everybody knows you and admires you; if not, everybody remembers you.

Similarly, raising questions in class can bring students the same risk, as students might feel concerned about whether their questions are stupid. So, teachers' attitudes are critical in prompting students to raise questions and express opinions. Tian perceived that teachers' encouraging and supportive attitudes were a prerequisite to his interactions with teachers, as it brought forth an atmosphere that was risk-safe and constructive. Tian referred to a supportive learning environment as:

> the one in which if you make mistakes nobody will laugh at you. It allows you to make mistakes and then if you make mistakes someone will help you.

Also he gave an example of it:

> When I studied English in ESL program, there were some errors in my grammar. The Canadian teachers always say, "you speak very well" at first, and then they told me that I had some little problems. Always, they gave me positive response at

> first.... I needed this kind of environment when I was new here. Now I don't mind. Definitely you need it when you are new to an environment. If I say something, you tell me immediately I am wrong, then next time I might not dare to say anything.

Clearly, Tian's data indicates that teachers' encouraging attitude and supportive response can prevent students from feeling shamed or humiliated by making mistakes in public. It suggests that being positive doesn't mean that teachers should not criticize students; it means that teachers should criticize students in a constructive and caring way, thus students can sense that teachers are helping them grow and then feel supported.

In summary, students perceived that teachers' attitudes had a critical influence upon student-teacher interaction, and to make student-teacher interaction active, teachers' positive attitudes were necessary. The importance for teachers to be positive is supported by a staff member of the Undergraduate and Record Office at the University of Victoria, whose argument is that a negative experience has much stronger influence in students than a positive experience. She said:

> We always remember that we're representing the university so we try to present the University of Victoria as a place, you know, that cares about students, that kind of thing. A few years ago, we put on a workshop, called Super Host that the provincial government designed for the tourism industry – but it's for any industry. And [they] talked about first contact, and things like that. If we are going to be a contact for students, we want it to be positive and helpful. And they pointed out, if a student has a negative experience, it takes seven or eight more positive contacts before the negative experience got erased. So, it's not a good idea to have negative experiences.

The importance for teachers to be positive can also find support from empirical study. In Kearney et al's (1991) study about undergraduate students' perceptions of teacher misbehaviors, sarcasm, and putdowns were identified as the most frequently teacher misbehaviors in the college classroom. Being authoritarian was also viewed as teacher misbehavior in student perceptions. Kearney et al. argue that teacher misbehaviors, those teacher behaviors that interfere with instruction and thus learning, can negatively affect student involvement in class. Schrodt's (2003) investigation about

students' perceptions of instructors' aggressive communication found that if instructors engage in verbally aggressive behaviors – which involves attacking the self-concepts of students, such as using insults to respond to student disagreements, losing their temper, and/or making fun of students – students would sense a feeling of misunderstanding, and instructors' credibility and evaluation would diminish.

Teachers' accessibility. Three students attributed, either implicitly or explicitly, not asking teachers questions to teachers' accessibility. For example, Xian explained why she sought help from teachers more frequently in Canada:

> ... in China mainly teachers answered questions after class. It was not very possible that students went to teachers' offices for help [because teachers didn't have individual offices and there were so many students for one teacher]. But now, Canadian teachers give us office hours, or we can send e-mails to teachers. So it is very easy to find teachers and ask them questions.

Xian also reported that the Chinese teachers in her university didn't leave students e-mail contacts or have regular office hours to answer students' questions. Thus students normally just ask questions after class. Xian's data implies that the quantity of interaction between students and teachers was affected by teachers' accessibility.

Another student, Kong, highlighted the use of e-mail contact in improving the teachers' accessibility. When Kong was asked what his ideal education should be, he answered:

> School should strengthen the connection between teachers and students. Like here, it's very convenient. Every teacher leaves an e-mail address to students and s/he definitely will reply students' e-mails. And s/he tries to solve your problems as soon as possible. Students will not feel that the teachers are not approachable or it's very troublesome to look for teachers. To seek help from teachers is a very easy and casual thing.

Apparently, e-mail might be easily used in a university that has a lot of computers and Internet facilities. However, students' preference for e-mail actually reveals that students wanted to have access to teachers individually and have teachers respond to them quickly. Students' requests for quick responses from teachers imply that the

teachers' manner in offering help might be a criterion of teachers' accessibility. Kong's further comment makes this point clearer:

> Here in Canada the teachers are very responsible for their jobs. I sense that even if I always ask questions, the teachers do not make short shrift of their job.... Also, they will contact you via e-mails. If you have problems you can discuss about them with teachers. Things are different in China. Basically it was hard to find teachers after class in China. Additionally if you go to the teachers for help there is a very strange feeling. It's like your purpose is not to discuss about academic problems with them ...but to get in by the back door (zou houmen).... That is I felt it was not easy to approach Chinese teachers in order to ask them questions. It's not like here, asking help from teachers is comparatively casual. That is, sometimes if teachers ask one question, and some students challenge their opinions, the teachers are okay with that. They will discuss it with students.

Clearly, Kong's term "casual" referred to the teachers' manner of offering help. Kong's data suggests that in students' perceptions, whether teachers are accessible for students was actually associated with two factors: students' access to teachers and teachers' manner of help, which includes teachers' positive attitude and responsiveness. When a teacher is accessible, students can find the teacher easily, and meanwhile perceive that the teacher is willing to offer help respectfully and that he or she responds to students' requests or questions quickly.

This finding about students' perceptions of "accessibility" is echoed with some students' perceptions of "useful student services". Three students (Fang, Mei, and Hua) mentioned five student services in the University of Victoria that were useful for them. These students commented that these services were easily accessible or could be accessed for a long period (e.g, Mei said, "The service is open long time per day; it is open everyday") and the staff in those services showed willingness to help (e.g., Hua said, "Whatever problems you have in your study you can go to see them. They will do their best to help you."). Fang even explicitly acknowledged that the service manner was the key factor that brought forth a positive influence upon students in an informal talk. She said, actually it does not necessarily matter whether the student services really could help her or not; it's the feeling, having somebody listening to her, caring and respecting her,

that made her feel good about the services and her learning experience as well. Clearly, teachers' manner is essential in students' perceptions of useful help or support. The importance of a helper's manner is also acknowledged by several staff members of the student services in the University of Victoria, which students mentioned as helpful ones. A typical example is as the following:

> The main thing you have, you try to do with people here, is you ask them to feel the services is not me answering your questions; the services is me trying to help you. (A Computer Counselling Services Staff Member)

Obviously, this staff member agreed that giving students a supportive feeling is the key of their services. Also, he recognized the responsiveness of their services is also essential in the help they offer. He thought that giving students response is a key part of their services:

> You can always answer, you might just not give them a good answer. Maybe I [would] say, "I've looked at your problem, but I cannot find a solution to it. Perhaps your professor can help". You can always answer. That's a part of our services...that's what we aim for. (A Computer Counseling Services Staff Member)

These findings about teacher accessibility are supported by other studies. Powell-Mikle's (2003) research in college students' perceptions of exemplary mathematics teachers reveals that the teacher availability is one of three characteristics of exemplary teachers. Also the availability in the students' point of view is not simple accessibility; it includes teachers' willingness to help and their caring attitude: these good mathematics teachers spent time with their students, offered help outside of class, made students feel comfortable to ask for help, provided additional examples, and made the material easy to learn (Powell-Mikle, 2003). McCroskey (1992) believes responsiveness is one of three factors (empathy, understanding, responsiveness) that lead students to perceive the teacher as caring about their welfare. "Responsiveness is exhibited when teachers react to student needs or problems quickly, when the teacher is attentive to the student, when the teacher listens to what the student says" (McCroskey, 1992, p.111). Evidently, when teachers can always respond to students' questions and requests quickly and in a

nurturing manner, students perceive teachers as caring. Consequently, teachers' credibility increases, and then student motivation and learning can improve.

Teachers' methods of teaching. Three students' comments reveal that how teachers teach could affect students' motivation to raise questions and express their opinions in and after class. For example, when Kong was asked to explain why he said Chinese classes could not stimulate him to discuss, he answered,

> This is related to teachers' way of teaching. In Chinese classes basically teachers just asked us to turn over the pages of the textbooks; they pointed out some key points; then they wrote on the blackboard, after that they talked for a while. One thing is that there was not too much room for students to interject. It's different here in Canada. After delivering part of the lecture, teachers will ask students whether they have questions or not. If they don't have any questions then the teachers will go on teaching. Maybe some students want to ask questions during the lectures. When teachers notice that, they will ask them to wait a minute [and then they keep on finishing their talks]. Then they will ask you what questions you want to ask. I think this way of teaching is better.

It's clear that when teachers just kept on lecturing, it gave little room for students to raise questions or express their opinions in class.

Fang viewed that the lack of interaction in class reflected that teachers are the authorities of knowledge. She said:

> Normally [in China] teachers kept on talking throughout the class. They seldom stopped. Well, it varied – actually it depended on the individual teacher. But, generally teachers would talk through the class.
>
> Q: You mean this way is not interactive?
>
> Interaction? I will say teachers know everything.... They speak and we listen. That's it.

Apparently, when teachers just lectured in the class, they left students an impression that students' opinions are not important or not valued – students are just there to accept knowledge. This impression about teachers might demotivate students to express their personal opinions and participate in-class discussions.

Kong and Fang's data indicates that students perceived that teachers' ways of teaching affected students' motivation to raise questions and express their ideas in and after class. They believed that to prompt visible student-teacher interaction teachers should use interactive ways of teaching. Students' preference of interactive ways of teaching is supported by Powell-Mikle's (2003) research about college students' perceptions of exemplary mathematics teachers. She found that classroom discourse, which refers to the "give and take" between students and teachers, is one of the characteristics that students appreciated in good mathematics teachers. These exemplary teachers "freely asked questions of their students, encouraged students to ask questions, and responded to questions in a respectful and patient manner" (Powell-Mikle, 2003, p. 90).

When it is necessary that teachers use more interactive ways to teach in order to prompt student-teacher interactions and thus make class active, they need to be aware that they cannot use their authority to force students to interact with them. This is suggested by a unique set of data. Fang didn't like Chinese teachers directing questions to her and asking her to answer it in class when she had not volunteered. Fang thought Chinese teachers might want to use this way to stimulate students to express opinions, but it didn't work. She said:

> The last thing I like is that in China teachers liked to call students to answer questions. Especially in a math class, the teacher wrote a question on the blackboard, and then s/he said, "Who wants to solve it?" Normally nobody would like to do it. Then s/he said, "I will call the roll".... I felt very strange. I had been called several times by the teacher [in China]. I wondered: Is it necessary? I thought if I get up to solve the problem, all students in the class know whether I know how to do it or not. If I know how to do it, of course everyone will admire you. But if I don't, of course I have pressure – I feel that all classmates will know that I don't know how to solve the problem.

Obviously, Fang viewed directing questions to students made students worry that they might lose face. This concern might distract students from learning, decrease students' willingness to interact with teachers and engagement during the interaction, thus

decreasing the benefit of the student-teacher interaction for students' learning and motivation.

Teachers' language. One comment in a student's data suggests that the language barrier could inhibit the student-teacher interaction. Guan liked to have good relationship with teachers. He thought that would help his learning. But he could not have a close and good relationship with teachers in Canada. The reason of it was the language barrier. He said:

> The kind of education that fits me should shorten the distance between teachers and students. But here [in Canada] my wish to have a good relationship with teachers cannot be fulfilled. Why? Because you cannot communicate with teachers.

Language barrier not only inhibited Guan from forming a rapport with Canadian teachers, also it did harm to his learning. Guan complained that language difficulty increased and his learning suffered when the instructors were not native English speakers and could not speak English well. He said:

> My suggestion for a better education is: Don't give us foreign teachers who are not native English speakers. [In one class in which the teacher was a non-native English speaker,] students could not understand what the teacher said. The class discipline was really bad – many people talked in the class.

It's clear that Guan believed that the language barrier between students and teachers decreased teaching efficiency, class engagement, and even the classroom discipline. It seriously inhibited the visible and invisible student-teacher interaction.

The negative influence of teachers' language or speech is also revealed in Kearney et al.'s (1991) study of college teachers' misbehaviors. This research found the category, "enunciate poorly or speak with difficult foreign or regional dialect", was included in the profile of incompetence, one dimension of teachers' misbehaviors perceived by students.

In summary, students perceived that the interaction between teachers and students was influenced by four factors: teachers' attitudes, accessibility, methods, and language. These factors could affect the student-teacher interaction because they influenced student perception of teachers or decreased the quality of interaction.

Invisible Student-Teacher Interaction

Four students expressed that they liked active classes in which teachers trigger them to think instead of just teaching them what textbooks say. In other words, the active class in student perceptions was the one having rich invisible student-teacher interaction – students actively think in the class.

Fang's data. The idea of "invisible interaction" and the relationship between invisible interaction and active learning originated from one student's (Fang) data. Fang said:

> My idea of participation in class is that there should not necessarily be discussions in every single class.... If I can truly participate in the class, the teacher should inspire me a lot. What I mean by participation is that not everybody needs to speak out in the class; it's a feeling that I am with the class.

Obviously, Fang believed that the active thinking in class is one form of class participation. This suggests that student-teacher interaction can be an invisible exchange of thoughts in students' and teachers' minds. This idea is supported in Fang's next statement about the Canadian teachers she likes:

> The teachers I like, in their classes you don't feel they are instructing you; you feel they are guiding you. That is, s/he will give you a lot of theories, but you don't feel scared. In this case I seldom worry about whether I can study well. But, some teachers gave me feeling that I could not study well no matter how.... Here [in Canada] the teachers will inspire you, always. For example, s/he says "I ask you a question, you go back and think about it." When s/he is teaching, I feel s/he is very gentle – I keep on communicating with the teacher in the whole class. Actually I don't always answer questions. But when s/he asks a question, I will think about it. I like this communication process. I feel that we are communicating, not just me accepting. When I was in China – maybe my intention was not right – I thought if I answered teachers' questions quickly, I would leave them a good impression. But, I didn't really engage in class – the answers of the questions were in the textbooks. Here the teachers, whom I like, ask questions that are heuristic.

Fang's data suggests that: (1) a truly active class is not necessary a noisy or busy one, showing vividness superficially. It can be a very quiet class with active invisible interaction between students' and teachers' minds underneath the quietness – teachers initiate an idea and it triggers students to think, then students give teachers their feedback through visible or invisible interactions immediately or later. So, interaction is not necessarily visible or immediately bilinear. (2) Students learn better when they are encouraged to think, whereas when teachers just impart knowledge students do not learn. In Fang's words, that is, she learns better when teachers do not instruct but guide her.

One can understand "invisible interaction" better when considering Chinese students' cultural background. As Gao, Ting-Toomey, and Gudykunst (1996) pointed out:

> In Chinese culture, there are conditions associated with speaking, and not everyone is entitled to speak. People only voice their opinions when they are recognized. Recognition often is derived from one's expertise on a subject due to years of experience, education, or a power position. A spoken 'voice', thus is equated with seniority, authority, experience, knowledge, and expertise. As a result, listening becomes a predominant communication activity. (p. 285)

Under this cultural belief, Chinese students normally show listening-centeredness in the classroom – they listen to their teachers the majority of the time. But, Gao et al. argue that Chinese communication is not necessarily non-reciprocal and passive – it "appears to be 'passive' in speaking, but it emphasizes 'activeness' in listening" (p. 286). Listeners need to be able to receive and interpret a message. So Chinese international students who have been educated in a Chinese context for a long time might be good at learning by listening and they might tend to learn by listening more frequently. In other words, invisible interaction might be a major way for Chinese international students to learn.

Other students' data. Hua, Kong, and Tian also defined an active class as the one in which students' minds are active – students can be triggered by teachers and think actively. In Kong and Tian's perceptions, to make a class active – in other words, to trigger them to think – teachers need to demonstrate their professional competence, for example, they need to show they have high-level thinking abilities or depth of thought. To achieve it, Kong and Tian believed that teachers should explain materials from

multiple perspectives or employ practical examples in teaching. Their perceptions are indicated in their words in a group interview:

Q: Kong, you said you like "casual" teaching style because this style makes you think and learn easier, what do you mean by "casual"?

Kong: I mean I don't want teachers to teach me by only reading books to me, I want them to give me more practical things. Then I will feel that s/he is telling me his or her personal knowledge, not just reading the textbooks. I sense the learning effect is better in this way.

Tian: Teachers should give students more things that are connected with the social reality, not just limited to the textbooks. I had a teacher before. S/he was really terrible. S/he told us in which page and which line the content that s/he talked in class was. Whom do you think you are teaching, high school or elementary students?

Kong: If teaching is just reading what the textbooks say, everybody can do it. Why do I need to learn from you? Only if you are able to understand some knowledge that impresses me, I will learn from you.

Tian: Teacher should teach like a master... who broadens your mind. By listening to her or his explanation, you can realize there are other ways of understanding; your mind is broader.... One philosophy teacher in my Chinese university is such an exemplar.... S/he picked up one small incident, then s/he would tell you this philosopher thinks it in this way, that philosopher thinks it in that way. After s/he taught us like that, you would feel that the knowledge is very useful. That's the feeling that a master would give you.... To make class active, the teachers not only need to give us practical examples, but also, they need to have deep thought.

Kong: And they need to show their level of thinking ability. We don't need a teacher who just reads textbooks to us.

The above students' data indicates three perceptions of students. First, both Tian and Kong preferred to learn with teachers who have high professional competence and they learned better with them. This phenomenon can be explained based on McCroskey's (1992) study about teacher credibility. According to McCroskey, teachers' professional

competence is one dimension of teachers' credibility. Thus the teachers who are perceived by students as having high professional competence can have high credibility. Students feel more interested to learn from teachers who have higher credibility and they also learn better with them (McCroskey, 1992).

Second, when teachers guided students to see multiple perspectives of one concept or event, Tian perceived that these teachers thought deeply and they triggered students to think, thus making their classes active. This understanding is drawn from the following analysis. As said before in the "Comfortable Learning" section, in Chinese, "master" refers to a person who is a leading expert in one field and has deep thought. According to Tian's words, he defined master as a person who can see an event from multiple ways. So Tian's words mean that a teacher who can introduce materials from multiple perspectives has deep thought. Tian's perception can find support from Bateson (1979/2002) and Gardner (1991). According to Bateson, difference brings depth – a deep understanding of one concept is acquired through different understandings of it from different perspectives, and the depth of one's thought is built upon multiple perspectives. According to Gardner, a person with authentic understanding of one concept should have "a flexibility of perspectives" – s/he should be able to present and use the knowledge in different contexts and in multiple ways. So, when teachers guide students to see different perspectives of one concept or event, not only are they helping students deepen their thinking and reach an authentic learning, but also they are convincing students that they have authentic understanding of what they are teaching. Thus students can perceive that these teachers have high professional competence.

Third, when teachers used practical examples to teach, Kong perceived that these teachers had high-level thinking abilities and they triggered students to think thus making their classes active. Since to apply knowledge one needs to employ high-level thinking abilities, such as analyzing, abstracting, and generalizing instead of just reciting and memorizing, when teachers use practical examples to teach they are convincing students of their professional competence.

Kong and Tian's perception – multiple perspectives and practical examples can trigger students to think, making a class active – is further supported by Fang's and Hua's data. Fang talked about a boring class:

> Normally I will not do things other than listening to the teacher in class unless the class is really boring. Last term I took one teacher's class. S/he was a nice teacher, but s/he could not teach well. S/he just copied some sentences in the textbooks and made projections. S/he just talked about these projections in class. You know, the contents in a textbook were kind of abstract. I spent one hour listening to her/his lecture, and I still needed to read the book by myself at home for 5 or 6 hours. Then what is wrong with attending the class? I don't need to attend that class. If s/he just recites what the textbook says, I don't need to attend the class. I can learn by myself. Every time I attended the class, the Chinese students sitting besides me read Chinese books or novels…
>
> Q: So, you mean when the teachers just teach what the textbooks say, they don't help you understand?
>
> Most likely. That is I need to spend a lot of time studying this course, because even when I attended the class, s/he just recited the textbook. I think s/he didn't show any of her/his personal understanding.

Obviously, Fang thought teachers showed their personal understanding when they were presenting materials in their personal ways instead of repeating what the textbooks said. She sensed only the perspectives that were different from the textbooks' perspective helped students learn. Fang's data suggests that different perspectives make a difference in students' understanding; a class that cannot make a difference in students' mind is not attractive for students.

Hua's answer of the question "What methods or styles of teaching do you like?" in the questionnaire suggests that using practical examples in teaching can prompt invisible interactions between students and teachers. Hua wrote:

> I like active style. Not just teaching inactively. Students can understand the contents in the textbooks by reading it on their own. Teachers should not just repeat what the textbooks say. They should give students some vivid examples, which can connect the textbooks with the reality and trigger us to think.

To summarize, student data indicates that students liked active classes and they learned better there. Student comments of active classes suggest that the quality of an active class was about the richness of interactions between students and teachers.

"Active" in students' perceptions referred to the active situation of their mind. Thus, no matter whether teachers and students interacted visibly or invisibly, the key point about an active class was that students should be prompted to use their minds to think.

Part 2: Interaction Between Students and Local People

One student's (Guan) data suggests that active learning for international students might need to include rich interaction between students and local people (including local students), which could have significant meanings for international students' academic success and personal development.

Guan considered the interaction with local students or other people as a way for Chinese students to build connections with the local community. For Guan, a lack of this kind of interaction caused alienation and isolation and he also thought it was a failure for Chinese international students. Guan said:

> I sense that I am not connected with the school tightly in Canada.... You would not have this feeling in China because you had a head teacher and classmates in your cohort class. There were only a few people in one class and you saw them every day. Here, every day there are a lot of students in the class, but after class, everyone leaves, nobody talks with you. As far as I am concerned, as a Chinese, I cannot make friends with foreigners. A lot of Chinese I know don't have foreign friends either.... After all you live in other people's society. If you cannot communicate with the local people and immerse yourself in this society, then there is no meaning to live here. Chinese students cannot melt into the Canadian groups and society, I think, it is the failure of Chinese international students.

Also, Guan commented that the lack of interaction with local people resulted in some Chinese students' failure in a Co-op program:

> Yes, there is Co-op in the business program, but it's difficult for Chinese students to find [a Co-op job].... The key problem is still English. Many problems are related to your language.... I think not being able to blend with the foreigners is also the reason why Chinese students fail in the Co-op program.

The reason for Chinese students' failure in the Co-op of the business program can be understood as the following: while students have difficulties interacting with local

people, they might tend to make friends with other students who are in the same language group. This has been identified by four out of five student services staff members who participated in this study. They commented that Chinese students liked to stay together. Always staying in the same language group isolates students further from the local society. Thus students might not be able to improve their English proficiency and their knowledge about the local society. Consequently, both their learning and the co-op program suffer as they might fail to connect school knowledge with the local society and communicate with local people well.

Based on a few students' data, except for language difficulties and cultural differences, the reason that they could not make friends with local people is they no longer studied in a cohort class as they did in China, thus they lacked frequent interactions with the same group of people over time. For example, Ping said,

> I like the big cohort class in China. There were class activities, everyone attended, it facilitated students to get to know each other and make friends. Or when we lived in the dormitory, we interacted with each other quite often. So we had many good friends.... But here, because of the design of courses, the class is very loose. Everyone leaves after class. People don't know each other, so it's very difficult to make friends....Yes, there are a lot of clubs and organizations here, like the Chinese Friendships Association. But, there are so many people in one association, only gathering together for one time, you cannot know anyone in this way.... Also all activities are voluntary... [so] at every activity you see different people, not the same group.... You cannot make close friends with people if you only meet them one or two times...[whereas] you stay in the same group over time, friendships can emerge.

Clearly, Ping perceived that the active interactions between students and local people were the preconditions of the development of friendships.

The importance of interactions with local people for international students has been recognized by the staff member of the Career Services at the University of Victoria. This staff member remarked that the international students who were able to find a job in Canada were those students who make effort to make friends with local people and get to know local society actively. She said:

> The students whom we find out are doing the best are the students who have Canadian friends, who make effort to learn English, the idiom, and the expression, to understand all of the rules of the language. And when they come to see us, they could be Canadian, almost. Basically, they are very understandable, no problem in writing, their writing is fine. Speaking is fine, eye contact [is fine too]. They learn Canadian culture. So if they go to interview, they are going to fit in because they are like everybody else. People who have the problem are those who don't make effort to do that.

Kim and Sedlacek's (1995) study also supports the importance of social interactions for international students. They find that social interaction is associated with international students' success. They suggest that it is necessary to assist international students in building a social support system to increase their satisfaction with their college experience.

CHAPTER 5 CONCLUSION

There are two parts in this chapter. The first part summarizes the key findings of this study and discusses the implications of these results, which provides some practical strategies for Chinese learners and Chinese and Canadian educational systems. The second part examines the limitations of this study and presents some suggestions for future research.

Summary of Findings and Implications

Findings

This study finds four themes that constituted meaningful learning for international undergraduate students at the University of Victoria who are from Mainland China and have had post-secondary educational experience there. These four themes are Practical Learning, Learning Under Pressure, Comfortable Learning, and Active Learning. In other words, from students' perceptions, the learning experience that could motivate and facilitate students' learning and also was valued by them had four criteria: practicality, pressure, comfort, and activeness.

Practicality is the key criterion of students' perceived meaningful learning. When learning was practical, students were motivated, their learning was facilitated, and their personal development also could benefit. Practical learning in students' perceptions includes four layers: (1) It is useful for students personally; (2) It is useful in the social reality, and it emphasizes practice; (3) It improves students' general ability thus enhancing their autonomy and mobility in the human society; (4) It helps students form enduring attitudes, especially "practice awareness" thus benefitting students' holistic development. Students who are aware of practice have high autonomy and initiative, and they connect theoretical knowledge with social reality through practice to make learning useful for them and/or the society. The finding of practical learning emphasizes the importance of relevance, hands-on experiences, and autonomy in students' meaningful learning. It also highlights that the out-of-school experiences can play a significant role in international students' meaningful learning. Out-of-school experiences add significant value to the practicality of an international study, by improving students' general ability

and/or changing their attitudes about life and the world. This finding about the importance of out-of-school experiences is consistent with the research result of Kuh's (1995) study. Kuh studied college seniors' perceptions about the outcomes of their out-of-class experiences and he found a positive relationship between the out-of-class experiences and student learning and personal development. Moreover, students' preference for practical learning that can improve their general ability and their attitudes suggests that students don't just value professional development; they also care about their personal development – they want to increase their professional ability and also their general ability through their learning experience, no matter in school or out of school.

Students perceived the right amount of pressure for learning played a positive role in their motivation and learning and this pressure could come from teachers' pedagogy, institutional regulations, and other learners. The positive effects of pressure revealed in this study can find direct support from an internationally renowned psychiatrist – Viktor E. Frankl (1946/1984). Frankl believes a certain degree of tension is indispensable prerequisite of mental health. He wrote,

> ... mental health is based on a certain degree of tension, the tension between what one has already achieved and what one still ought to accomplish, or the gap between what one is and what one should become. Such a tension is inherent in the human being and therefore is indispensable to mental well-being. We should not, then, be hesitant about challenging man with a potential meaning for him to fulfill. (p. 127)

Obviously, it is implied in Frankl's words that in the educational context students need to be challenged by school. Similarly, in this study, students' need for pressure suggests that students want to be challenged by university in order to learn authentically. The pressure for learning brought students tension, thus challenging students and triggering them to raise their effort to study. Students' need of pressure also suggests that students prefer to have regulations to support their autonomy. Students didn't want to have extremely high-level of autonomy without any external restriction. They pursued a learning environment that can give them pressure for learning, thus helping them control themselves and maintaining their motivation, so that they could be kept on the track of learning thus benefitting their future. The pressure for learning can serve as external restriction that

prompts students' responsibility in their study. Moreover, in this study, students' need for pressure was related to their educational history and different students asked for different kinds and amount of pressure. This suggests that students prefer the education that is relevant to their personal contexts. The finding of the positive effect of pressure in students' motivation and learning emphasizes the importance of relevance, challenge, and using restriction to support students' autonomy in students' meaningful learning.

In this study, when students had more choices, less restriction, more convenience, and less stress, they felt comfortable and their motivation and learning benefitted. Students preferred to have choices in what they learn and how they learn in their study, and to have multiple instructional tools, rich learning facilities, and various channels to get help. Students disliked excessive restriction in their study, their lives and thoughts, limited opportunities in evaluation, and acute competition. Students' likes and dislikes suggest that students value a kind of flexible education in which students' diversity and autonomy are supported and encouraged. Students' various criteria for comfortable learning suggest that there are multiple means to make students feel comfortable, thus increasing their motivation and learning.

Students' dislikes of excessive restriction does not contradict with students' need for restriction suggested by the finding of pressure for learning. Students' appreciation for some restriction and opposition of some restriction suggests that educators should pay attention to how they set restrictions and guidelines, or how they provide guidance.[7] Restriction can prompt students' responsibility and initiative only when it is employed under the premises of respecting and encouraging students' autonomy and diversity. Similarly, without contradicting students' need for pressure, students' need for non-stressful environments once again emphasizes that the right amount of pressure is extremely important for learning. In this study, when the pressure of learning was too high, students' activity was squeezed out – they lost the sense of having self-control and formed a negative attitude towards learning and/or their classmates. In this situation, students' motivation and learning could not benefit from the pressure for learning. The peer competition and the evaluation can be challenging rather than stressful if we set them right.

Rather than indicating that students don't want to put effort into study or that they prefer easy learning tasks, students' preference of a convenient learning environment needs to be understood with students' need of challenging tasks together. Students were willing to make effort to learn difficult tasks that require them to think, but they did not like to waste time looking for learning resources and they did not want to do this kind of simple work repeatedly for a long time. This phenomenon suggests that the challenge valued by students should encourage the development of higher thinking abilities, not simple mental functions. The convenient learning environment, which can save students' effort from doing simple work thus allowing students to focus on improving their higher mental thinking, is valued by students and benefits their motivation and learning. The findings on comfortable learning emphasize the importance of relevance, autonomy, and supportive community in students' meaningful learning.

Students preferred to be active in their study and they liked to have rich interaction with their teachers, in visible and/or invisible ways. Student-teacher interaction benefitted students' motivation and learning by helping students think, increasing students' perception of the credibility of teachers, and prompting students' engagement and involvement. Student-teacher interaction increased when teachers showed caring and supportive attitudes, were easily accessed, used interactive ways to teach, and showed students their professional competence. A few students also recognized the importance of interaction between international students and the local community for students' study. The finding of active learning indicates the positive effects of the interaction between students and teachers and teachers' positive attitudes on students' motivation and learning. It emphasizes the importance of a supportive community in students' meaningful learning. Also, it suggests that the interaction between international students and local people in their community might increase students' connection with the local society, thus playing an important role in students' meaningful learning. Additionally, the finding of active learning highlights the significant influence of the invisible student-teacher interaction in students' meaningful learning. This suggests that what teachers teach can affect students' motivation and learning. This finding accords with the result of Gorham and Millette's (1997) study. Gorham and Millette examined the teacher and student perceptions of sources of motivation and

demotivation in college classes. They found that college students viewed the instructors' overall choice and organization of course material as one factor that demotivated them in class. The findings related to invisible interaction also suggest that what teachers teach can influence students' perceptions of teachers' credibility (e.g., professional competence), and then affect students' motivation and learning.

The importance of interaction in students' meaningful learning is found through the analysis of students' data. It can find substantial support from several educational theorists' works. Dewey, Doll, and Vygotsky have already emphasized that interaction is a key factor in education. For Vygotsky (1978), learning is a social process. He stated, "human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them" (p. 88). Thus, interaction is not only inevitable, but also extremely important for learning. Vygotsky (1981) believes higher mental functions, such as voluntary attention, logical memory, the use of cultural sign systems, and the development of volition, are all firstly formed in the collective through social interaction, and then they become mental functions for the individual through internalization. He writes,

> Any function in the child's cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interpsychological category, and then within the child as an intrapsychological category. (p. 163)

It's clear that for Vygotsky, social interaction is the origination of cognitive development.

For Dewey (1938), interaction is one of the criteria used to distinguish an educative experience from a mis-educative one. That is, any experience that is educative has interaction between a person and his or her environment. And the environment,

> is whatever conditions interact with personal needs, desires, purposes, and capacities to create the experience which is had. Even when a person builds a castle in the air he is interacting with the objects which he constructs in fancy. (Dewey, 1938, p. 44)

So, the interaction in an educative experience is not limited to the interaction between people; it includes interactions with visible and invisible things, persons, and even thoughts, such as the interaction between the student's and teacher's minds, the

interaction between one's thoughts in different time, and so on. Obviously, interaction, in Dewey's understanding has visible and invisible formats. Also, the interaction "assigns equal rights to both factors in experience – objective and internal conditions. Any normal experience is an interplay of these two sets of conditions" (Dewey, 1938, p. 42). So, students' perceptions of an active class in which students are active agents are supported by Dewey.

For Doll (1993), interaction has significant importance for learning. Firstly, interaction brings conflicts and feedback, which are the essential sources of cognitive development. Conflicts cause problems, difficulties, and perturbations. Doll argues they are the driving force of mental development. Feedback enables humans to reflect on what we have done, thus meaning can be understood and cognitive transformation can be possible (Doll, 1993). Secondly, interaction with others enables humans to learn from others. Doll believes that humans "learn through, by, and with others – learning is not isolated, programmed activity" (p.119). As such, Doll suggests,

> we need to develop curricular plans and instructional strategies that utilize student-student and student-teacher dialogic interactions. Further, we need to realize that much of human learning comes from this interaction – via the conflicts that create the dilemmas which generate growth. (p. 120)

Dewey's, Doll's, and Vygotsky's educational theories suggest that interaction brings sources and chances for development, and an interactive environment is a responsive and reciprocal environment. The importance of interaction for student motivation and learning lies in its roles to provide support and feedback, produce conflicts, and increase involvement. In this study, students recognized the supporting and informing functions of interactions and perceived that interactions increased their involvement in the class and the local community, but they didn't mention any influence of interactions in their study by bringing them conflicts.

From a holistic view, the four themes (Practical Learning, Learning Under Pressure, Comfortable Learning, Active Learning) are interrelated and cannot be separated from each other absolutely. They are interconnected and would not exist without any other themes supporting. For example, if there is no enough pressure to urge students to put effort into study, even if the education is practical for students, students

might not study, as they don't feel they need to do it. If learning is not practical, even if students develop situational interests about one subject and they study hard in one class, their interests would not be able to last after the class ends, because they will be frustrated when they find out that what they have learned is useless in the social reality or they just don't know how to use what they have learned. When students think that what they learn cannot increase their competence to live in the real world, students will lose their motivation. Learning can be really challenging and practical for students only when they can have personal choices. A challenging, practical, and comfortable environment increases students to interact with the learning environment actively, and the interactions change students' learning environment in return. So, the four criteria interact with each other, and work together to make students' learning meaningful.

When taking the four themes as a whole, it is also clear that this study indicates that environment played a key role in student motivation and learning, and students were well aware of it. In this study, students clearly expressed that they could be influenced by the learning ethos in their learning environment. Students expected some pressure from their learning environment to urge them to study and have better self-discipline. Students' initiative was affected differently by different learning environment – whether it was inhibited or prompted, in some ways, depended on whether students were urged to take responsibility for their study and there was enough support for individual learning. Students' motivation and learning increased when they studied in a comfortable environment in which there were rich learning facilities and various assistants. The student-teacher interactions increased when teachers showed caring attitudes. All of these highlight that in students' perceptions meaningful learning cannot be achieved without a suitable learning environment. Especially, the finding of students' awareness of the importance of learning ethos in their learning tallies with what has been found in Chinese psychology: "Chinese have long placed great emphasis on the influence of the environment on behavior" (Stevenson & Lee, 1996, p. 134). Stevenson and Lee argue that Chinese believe people, especially young persons, can be affected by the environment unintentionally – people are capable of learning from models, and they would imitate other people's behaviors in their environment. Therefore, to motivate

Chinese learners to study, a learning environment with a good learning ethos is extremely important.

Moreover, similar to Littlewood's (2000) study, this study challenges the stereotype of Chinese students being passive learners. It is not necessarily true that Chinese students like to be controlled or passive even though they act in that way, and acting quietly doesn't mean they are passively learning either. In Littlewood's (2000) study, he examines some common preconceptions about Asian students and their learning attitudes and he concludes: "Asian students do not, in fact, wish to be spoonfed with facts from an all-knowing 'fount of knowledge'. They want to explore knowledge themselves and find their own answers" (Littlewood, 2000, p. 34). In this study, students purposefully pursued a better learning environment that has a good learning ethos and can urge them to be more autonomous. They showed clear preference of learning by doing, interacting with teachers either visibly or invisibly, seeking help by themselves instead of impositions from teachers and having personal choices in what they learn and how they learn. They didn't want to lose their control of their study and be controlled by excessive school restriction and unreasonable stress for learning. This suggests that Chinese students like to be active learners. Especially, it is shown in this study that Chinese students like to learn in an interactive way, and they often learn through invisible student-teacher interaction.

Implications

One implication of this study is that educators need to put effort into creating learning environments that can facilitate students' meaningful learning. Students' motivation and learning need to be supported by a suitable environment. Based on the findings in the study, educators should help to create a learning environment that is practical, challenging, comfortable, and interactive for students. Some practical strategies in both Chinese and Canadian post-secondary educational systems are suggested as follows.

First, educators should value students' out-of-school experiences, and consider ways to integrate them with students' in-school experiences, thus helping them benefit from their whole learning experience. It's not enough that educators just encourage

students to use what they learning in school outside of school, they also need to help students to see what abilities that they develop out of school can be transferred within different contexts in school, and how they can use out-of-school activities to develop enduring attitudes that can benefit their holistic development. Instructors need to consider ways to get to know their students and to develop relationships with them, in order to learn what particular knowledge students bring to a particular class, and how this knowledge can be used to scaffold further learning in meaningful ways. They need to assist and urge students to interact with the local community frequently. The interaction can help students increase their local sense and knowledge, build up local support networks, perceive the pressure from the social reality, and find some ways to apply what they have learned in the local society. The following are some ways that teachers can use to help students interact with the local community. Teachers can give students some assignments that require them to explore their local communities, invite some local people to speak in class, introduce local social organizations and organize field trips for students, facilitate students to locate, contact, and visit the social groups that they are interested in, encourage and assist students to volunteer or observe in different institutional or social events if these activities are applicable. To facilitate students' out-of-school experiences, it may be helpful to have an out-of-school activities coordinator or office to do that. It's also applicable to have students take a compulsory orientation course in their first term of university years, in which they can have many fieldtrips, explore the local community, and get to know the Canadian culture and society.

Second, educators should encourage and facilitate students to interact with their in-school learning environment thus increasing students' involvement and creating more feedback for their study. Kuh (1995) has suggested that institutions should encourage students to take advantage of existing educational opportunities in the institutions and, participate in all aspects of institutional life. He believes many educational opportunities "are outside the classroom" (Kuh, 1995, p. 150). Educators can set up some channels that allow students to contact them individually and quickly. Also, educators should try to give students fast and caring responses and feedback. E-mail contacts can be very efficient channels between students and teachers. This might be especially true for international Chinese students as they might write more clearly than they talk with

teachers face to face. In Canadian universities, it is better to have a coordinator who knows Canadian and Chinese cultures and school systems well, to facilitate the interaction between Chinese international students and their teachers and other school services. A Chinese international student who has studied in Canadian universities for a few years can be a good candidate of this kind of coordinator, as students might feel more comfortable to approach a person who is also a student having a similar cultural background with them. Moreover, educators should help to facilitate students' interactions with their peers and other people in their learning environment. Educators can help students form study groups with their fellow students or other people (e.g., professors having similar interests with the student, research groups, club members, alumni, and alumna), who can help students' learning, and encourage them to work together. In a study group, students can learn from others, get feedback for their study, and perceive a pressure for learning from other people. Also, some institutional or class activities can be organized on a regular basis, therefore encouraging students to get enough chances to make friends.

Third, educators need to set some restrictions to increase students' pressure for learning and support students' autonomy. Some realistic restrictions (e.g., due date, course works, tests) can make a learning task challenging if teachers can explain the rationale of the restriction (e.g., why the restriction is needed for prompting their responsibility and sustaining their mental health, how the restriction is unavoidable) and offer various help and room for negotiation at the same time. When educators use restriction as challenge for students, they should be careful. The restriction should only be set when it doesn't stop students from being different and autonomic and when it doesn't make students so stressful that they lose their mobility. It would be better that educators can invite students to discuss and/or set up the restriction with them together.

Fourth, to support and encourage diversity and autonomy, educators not only need to reach out to students frequently and listen to them actively, but also let students know that they can always raise their requests and ask for a change. This is particularly important for students who don't know they have rights to change or they could have an impact on their learning environment – such as school policy, student services, instructors, curricula and so on – because of their hidden assumptions. They might have

got used to the bureaucracy in their local societies, and have taken for granted that they can only accept things instead of changing them. In other words, these students' initiative is inhibited by their assumptions. Thus, it is the educators' responsibility to show these students how they can make a difference in their learning environment so that students can be active again. Also, educators should make sure students know where they can find help when they need assistance. Educators should make an effort to remind students that they do have options in their study, they can speak out regarding any of their personal needs, and that individual services are always available for them. For this reason, a long-term orientation program should be offered to new students.

Fifth, teachers need to be aware of the importance of invisible interaction for students' meaningful learning. Even when Chinese students act quietly in the classroom, they might be actively listening and thinking – their minds are active. Chinese students like to participate in the class by listening actively. So, for Chinese students, teachers can arrange some time for lecture. Also, teachers can show more their professional competence and caring attitudes to students to increase their credibility, thus enriching student-teacher invisible interactions and improving students' learning. To enable students to perceive their professional competence, teachers can explain one concept or event using multiple approaches (e.g., using visual instructional tools) or use more practical examples in teaching. This might be particularly important for the teachers of Chinese international students, because for students who are learning in a secondary language, multiple perspectives and examples can help them understand more easily. Also, teachers need to be aware that although Chinese students are fond of invisible interactions, they do have need to visibly interact with teachers. Chinese students might sit silently in the western classrooms because they are not used to challenging instructors or other students in classroom, especially when they have language difficulties. As Tompson and Tompson's (1996) study about international students from non-American countries shows, because some informal interactive behaviors in U.S. classrooms would be unacceptable in the international students' home countries, it is difficult for them to violate these ingrained beliefs and fully participate in classroom discussion. So, not only a warm, respectful, and supportive learning environment is very important for international Chinese students, it is also very necessary to invite students to discuss their

hidden assumptions about class participations several times in one term. Chinese students need time to get used to and learn how to fit in the western classrooms that have a more informal atmosphere. An orientation program or course about western styles of teaching and learning will help them.

Another implication of this study is that students need to take initiative in their study to create their own meaningful learning with their learning environment (including people and physical environment) together. A suitable environment can develop and maintain student motivation; however, students have active agency to influence the environment: they decide how they respond to the influence and their responses change their environment. A student's meaningful learning is not given by an environment that can facilitate meaningful learning – it is the result of the interaction between students and their environment. Students must attend to this process of creating their meaningful learning and take initiative in it. The following are some practical strategies for students to create their meaningful learning.

First, students need to explore and get to know the school and local community environment actively. They can participate in the school and community activities frequently by joining school/social clubs and organizations, attending lectures and performances, and doing observations in the school/local community. In this way, they can increase local sense and knowledge, and their interactions with local people. Second, students should create what is suitable for them instead of just sitting there and taking for granted that everything is set and they have to follow the existing rules. For example, students can create study/discussion groups to increase feedback of their study and chance to learn from others, creating supportive community by helping other people, and creating challenge by changing attitudes towards difficulties and restrictions – viewing them as positive and necessary for one's mental health. To create a suitable environment for their meaningful learning is crucial for students, especially those Chinese international students studying in Canadian universities. Compared to the rigid Chinese post-secondary educational system, the Canadian post-secondary educational system might be more flexible and encourage more autonomy and diversity. Also, generally speaking, the local people might grant international students – the newcomers of a society – more tolerance for making mistakes, raising "weird" questions and "strange" requests,

and behaving strangely. Therefore, international students actually benefit from being strangers in a foreign country. Students need to take advantage of these benefits to create a learning environment that is more suitable for their meaningful learning – for example, a learning environment which is more practical, comfortable, challenging, and interactive for them. Chinese international students need to raise their questions, requests, concerns, needs, and wishes and have them discuss with educators and other local people in their learning environment. It is the Chinese international students' responsibility to let educators in the Canadian educational system know who they are, what they need, and how to adjust to their learning needs and styles. Chinese student organizations should facilitate and encourage their members to get involved with the school and the local society. Also, they need to help Chinese students speak up to voice their opinions.

In summary, the findings of this study lead to an implication that emphasizes the interaction between students and their learning environment. That is, to motivate and facilitate students' learning, it is not enough that educators provide students an environment that is practical, challenging, comfortable, and interactive; to enable students to form an awareness of motivation is critical. Educators need to help students to be aware of what can motivate and facilitate their leaning, such as to be aware of practice, challenge, autonomy, diversity, interaction and so on. With this awareness, students can purposefully seek and create the situations that can make their own learning meaningful. In short, it is students' initiative that educators should make effort to encourage; it is students' sensitivity in their consciousness that educators should help them to develop. To achieve it, a meaningful learning experience with four features – practical, challenging, comfortable, and active – is a prerequisite, as it brings feedback, challenges, choices, and conflicts, which all prompt students' initiative by making them think.

Limitations and Future Research

Methodological Limitations

It is a limitation that the questionnaire and interview questions in this study have been changed a few times during the process of this study. Although the purpose of these changes was to make the questions clearer and easier to be answered and the changes did

achieve this goal, these changes caused difficulty for comparison between individual and individual because students were not asked exactly the same questions. Students who were asked the older version of the questions had less to say about the questions than the students who were asked the newer version of the questions. Thus some students' data is much thicker than others' data. I tried to address this issue by truthfully recording each change in the chapter of methodology.

The participation of my former roommate (Ding) can be a limitation in this study. Ding might feel obligated to participate, as he wanted to be friend with me. Actually, Ding once asked whether he could quit the study because he was too busy. Although in the end Ding decided to stay in the study, he spoke very little in the interview and was not willing to clarify his ideas. The quantity and quality of Ding's data might be affected by Ding's lack of interest in this study. However, because Ding and I didn't know each other before he became my roommate, and we only were roommates for two months, during which we rarely met and talked with each other as we had very different daily schedules, Ding and I were like strangers to each other. Therefore although Ding's data is very limited, it is still trustworthy.

Using two languages in this study is also a limitation in this study. Since all student data were collected in Chinese and translated into English, it is unavoidable that the translation of students' data cannot present exactly the students' original meaning. Therefore, the language difference can influence the trustworthiness of the students' data, the understanding, and the interpretations of the readers. To decrease the negative influence caused by the language difference, I had a former Chinese English teacher check the accuracy of all the translation.

Also, because the interviews and data analysis involve interpersonal involvement, the researcher's influence cannot be completely controlled. Following are ways in which I, as the researcher, may bias the data. First, as an insider to Chinese culture, I may have some unconscious discourses that are taken for granted by Chinese. These discourses make me unable to notice some important kinds of data. Second, the richness and trustworthiness of data from interviews strongly rely on the researcher's interview skills. One of the reasons that some students' data is thicker than other students' data can be related to the improvement of my interview skills during the research process. Third, as a

person who has strong positive impressions about international study, I might not be sensitive enough to the negative student comments of international study during the data analysis and I described a rather favourable picture of international study in this paper. In this study, Yan, Hua, and Ping did say they might be able to learn well and authentically in China too if they had been willing to study there or had studied in one of the top two universities in China. Xian experienced a loss of motivation in Canada because of lack of peer competition in her study and she believed that the only advantage of Canadian universities is the physical learning environment and abundant individual study time. Several students mentioned that they had little interaction with local students and could not make many friends in Canada, whereas they had many friends in their Chinese universities. Although only two students reported the disadvantages of having little social interaction for their learning, the lack of social interaction might make learning in Canada less meaningful than learning in China. As the development of higher mental functions requires social interaction (Vygotsky, 1981), it is possible that Chinese students' learning can be inhibited in Canadian universities because of lack of social interaction, and be prompted in Chinese universities where they can have rich social interaction with their fellow students and other local people. Also, although in this study the Canadian educational system seems more flexible and practical than the Chinese educational system, it is not perfect. Some native Canadian students whom I know still complained that the system was not flexible or practical for them. All of these evidences positively suggest that Chinese post-secondary education can also make students' learning meaningful.

Moreover, I found that the interviews of student services staff didn't offer significant help in understanding students' experiences and opinions. The reason is the student services staff could not tell where the Chinese students they met came from. Chinese students who are from Taiwan, HongKong, or Canadian cities look similar to the Chinese international students from Mainland China. So, they could not tell me what experiences they had with Chinese international students from China. Whether this group of participants should be included in the future study of student perceptions is critical and needed to be decided based on how well they can increase the researchers' understanding of the case. However, although the interviews with the student services staff didn't play

an essential role in this study, they did benefit this study in the following ways. First, some students' opinions found support in student services staff's interview data. This indicates that these student services understood students' need, thus they might provide services that can really help students. Actually, according to Undergraduate Students Record Office staff member's interview data, their services has already been interactive. They purposely looked for students' verbal and nonverbal feedback[8] based on which they adjusted their services. Student services staff's data not only suggests that one part of students' learning environment in the University of Victoria was supportive, but also shows some good examples of the implications of students' opinions. Second, I practiced my interview skills by interviewing these staff. Also, by approaching, contacting, and interviewing them I got a sense of what kind of manner they will have when they help students. Third, three staff told me some Chinese international students failed to get involved with local community, to find a job, or to adapt to western classroom culture because they didn't try hard themselves. Their words suggest that students' meaningful learning should be co-constructed by students and educators.

Furthermore, this small-scale study is just a snapshot of a small group of Chinese international students at the University of Victoria. It cannot provide a representative picture of the entire population of Chinese international students. The findings of this study are also not generalizable to other international students' perceptions of meaningful learning. However, the rich findings from this small study and the consistency in student response suggest that students have thoughtful insights about their study and different students have some common needs. Thus their opinions are worthy of being considered for anyone who is interested in students' motivation and learning.

Future Research

It would be desirable to repeat a similar study on a larger scale in one cultural group and across cultures. But, some changes in the methodology to eliminate some of the limitations discussed above are necessary. For example, a pilot study on a larger scale should be employed to test the questionnaire and interview questions before they are used in the formal research; to decrease the influence of the researcher's bias on interview, it can be considered that to have more than two researchers to collect different data, and

then analyze data together; the future study can just focus on student participants; and it will be easier for the researcher to manage to examine students' perceptions of meaningful in-school learning and meaningful out-of-school learning separately in two studies and then compare the findings of the two studies.

By enlarging the sample size, the researcher can employ statistical methods to find out similar patterns in a large data set more precisely, and the research result can be generalized to a bigger population. Also, to help Chinese post-secondary educational system reform, Chinese students in China should be examined. So, a future study about students' perceptions of meaningful learning should target at students who are studying in Chinese universities and compare their opinions with those of Chinese international students who are studying university programs in foreign countries.

The important role of interaction in students' meaningful learning is suggested by this study, but it cannot be fully developed in this study. Students' data mainly focused on students' interaction with teachers. How students' interaction with other local people, especially their peers, influences students' meaningful learning needs to be examined in more depth. In this study, most of students reported a decrease of social interaction (especially the one with their peers) after they left their Chinese universities and studied in the University of Victoria. Since Chinese students used to study in a cohort group in which they can interact with their peers frequently, and they might interact with local people easily in China, thus the decrease of social interaction in Canada might have great impact on students' motivation and learning. So, what is the role of social interaction in Chinese international students' meaningful learning, and how the decrease of social interaction influences students' perception of meaningful learning, are worth exploring. Also, although students were well aware of the environment and that their personal initiative was important for their motivation and learning, how they perceive the ways they can change their learning environment and the role of their influence on the environment in their meaningful learning are not known. What role do they think they should play in their meaningful learning and their meaningful learning environment? To what degree do students view them as active agents who can change the learning environment through interaction, thus creating their meaningful learning? How do

students value the importance of changing environment through interaction in their meaningful learning? All these questions should be addressed in future studies.

It is also desirable to do a future study related to the role the out-of-school experiences play in international students' meaningful learning and how they affect students' motivation and learning. This study only suggests that the out-of-school experiences increase the practicality of the international study thus making leaning overseas meaningful. But it is possible that out-of-school experiences can contribute to students' meaningful learning by bringing students a comfortable feeling for their international study experience, by giving students pressure for learning, or by increasing students' interaction with the local people. For example, students might find a sense of connectedness with the local community or build a local supportive network through out-of-school experiences, thus they feel more comfortable to live and learn in the foreign country. Students might get pressure to improve their English in their volunteer works outside of school or in their social activities with local people. Meanwhile students' out-of-school experiences could increase students' interaction with the local environment and community. Therefore, it is necessary to examine how international students' out-of-school experiences influence the students' learning environment and therefore affect students' meaningful learning.

This study only examined the influence of a few students' contexts in students' perceptions of meaningful learning, it did not address other contexts, such as students' development stage, their cultural and historical contexts related to their home cities, and so on. In this study, two students (Xian and Ding) mentioned that their ability to self-discipline increased when they got older. Xian's motivation and self-discipline problem was solved as she got older and got used to the freedom she had after she had studied in Canada for three years. Ding remarked that which education system could benefit his learning was related to his age. He doubted the Canadian education system could benefit him as much as the Chinese one would if he had come to Canada when he was 19 instead of 22, as he might be too young to be able to adapt to the Canadian environment in which high self-control is needed. One student (Ping) mentioned that she started to feel the pressure of employment when she got older and this pressure motivated her to study harder than before. Students' data suggests that how international students view their

study and how they learn can be influenced by their age and how long they have studied in a foreign country – the older they are and the longer they study overseas, the better self-control they might have. It is inferable that age and the time of studying overseas can influence students' perceptions of meaningful learning. In this study, no data reflected the influence of students' gender and home city in their perceptions of meaningful learning. However, gender might have influence in students' meaningful learning. For example, female students might consider marriage earlier than male students do, thus they might have different expectations towards their learning. The home city also might influence students' meaningful learning. As different cities might have different economic development levels and experience western cultures differently in their histories, students from different cities might have different understandings of western cultures. Students' prior knowledge and acceptance of western cultures could influence their adaptation process in a western country, thus affecting their motivation and learning. Further study can include the factors of gender, age, the time length of studying overseas, and home city to examine what kind of impact they have on students' perceptions of meaningful learning.

In this study, most of the student participants' motivation and learning benefitted from their international study. Even the two students (Guan and Hua) who thought learning in Canada was not meaningful studied harder in Canada than they did in China. Only one student (Xian), who used to be a highly motivated student in her Chinese university, reported a decrease of motivation in the first semester in Canada. With the increase of self-discipline and familiarity with the Canadian educational system, Xian's motivation recovered and she studied hard again. It would be interesting to do a study related to how highly motivated international students lost motivation during their overseas study and how they regained their motivation. This kind of study probably can give more insights into how to improve international students' motivation and learning.

This exploratory study is a first step in the study of Chinese students' perceptions of meaningful learning. As the number of Chinese students who partake of overseas study increases, this study aims to get a better understanding about what this group of students need to be motivated and to learn well. Thus the results of this research can give both Chinese and foreign post-secondary institutions a reference to provide better services for

their students. It can also help Chinese students to achieve their meaningful learning in different learning contexts. While this study does increase our understanding of Chinese international students and suggests positively that both Chinese and Canadian education systems can make students' learning meaningful by co-constructing learning experiences with students themselves, it raises more questions than solutions:

- What is student perception of "learning" and "studying"?
- What is relationship between one's professional development and personal development in students' perception?
- What is student perception of learning that can contribute to their personal development?
- What is the difference between pressure and challenge in student perceptions?
- What kind of ways of interaction can motivate students? How do some forms of interaction (e.g., E-mails, discussion in/out of class, face-to-face talk) influence international students' motivation and learning?
- What is the nature of the interactions that Chinese students like? To what extent do Chinese students like visible and invisible interaction?
- What is the effect of students' out-of-school experiences in students' holistic development? How can educators help students make use of their out-of-school experiences to enhance their in-school learning and holistic development?
- What are the effects of Chinese post-secondary education in students' holistic development? How does it affect students' attitudes?
- What are the effects of overseas study in Chinese international students' holistic development? How does it affect students' attitudes?
- What is the long-term effect of an international learning experience?
- What are student perceptions of motivation? What do they do to motivate themselves?

The above questions are just a few of the many questions that arose during this study. To explore these questions, we need to be aware that to find ways to a better education, students' perceptions should be considered. The answers to our questions of education lie in the interactive conversations, negotiations, and collaboration among all stakeholders of education.

Epilogue

This study is not just a case study of a group of Chinese international students. It is also a self-study and an experiment of meaningful learning. This study was self-initiated based on my interest, with a purpose to find out some ways to motivate and facilitate my own learning. Through this research, I kept on using what I had learned from this project to motivate myself and facilitate my learning, and consistently reflecting on my experience. This study cannot be finished without a reflection on what I have learned about my meaningful learning through doing this study.

Firstly, I learned that interest is a developing process rather than a thing that one can hold. I used to think, because the key of my meaningful learning is interest, that as long as I am allowed to learn what I am interested in, I would engage in learning and learn well. So, I felt very frustrated when I found out that I didn't want to continue to work on my thesis even though I chose to do this study based upon my interest. I was confused. Did I lose my interest in motivation and education? Enlightened by Fang's comments about the development of her interest, which was the result of interaction between her and her environment, I gradually realized that because one is interested in something doesn't mean one has a thing named "interest" in one's hands; it just means one has a willingness to keep oneself interacting with a suitable environment, thus enabling one's interest to develop. It is the interaction between one and one's environment that elicits one's interest and keeps it developing. Similar to interest, my motivation and meaningful learning are all the results of the interaction between my environment and me. Therefore, to develop my interest, to motivate myself and make my learning meaningful, I need to purposefully seek and create a suitable environment that can prompt the development of my interest, enhance my motivation and learning, and consistently interact with the environment.

Secondly, I learned that practicality and creativity are also key factors for my meaningful learning. To motivate myself, I need to feel that what I learn is useful for me, and I need to sense that I am creating something new or making a difference in my and/or other people's understanding. For me, who likes to think, a learning that can make difference in humans' minds thus benefitting their cognitive development is both useful

and creative. So, if I cannot see or make a difference in my or other people's understanding, my motivation decreases and consequently my learning suffers. While doing this study, my motivation and learning decreased when I could not find any new understanding of my study thus I could not make personal progress, when I thought some interviewees' data just confirmed what I had already known, and when I thought my study would not bring a new understanding for other people and so that it would be useless. In contrast, my motivation and learning increased when my supervisor brought me a different perspective of my study, when I started to notice students' different definitions of some words (e.g., "huoyue (active)", "qingsong (comfortable)") that used to sound too normal to be questionable before, and when I could use what I learned in this study to help my own and other people's motivation problems. I sense that difference contributes to my motivation and learning by bringing me novelty and triggering me to think. To make my learning practical and creative, feedback is extremely important as it can enable me to see and make a difference in my and other peoples' minds. I shall self-initiate more discussion with other people in order to get more feedback of my work or thoughts, and perhaps reciprocate – find ways to give meaningful feedback to others.

Thirdly, I understood why I felt that it was so difficult to do a deep study in one area. It's not because I don't have interest in it, or am not willing to work hard on it, or am not intelligent enough to do it. The reason is actually related to my working habits and negative self-image. This understanding started from my new interpretation of "practical". Enlightened by Xian's idea of "practice awareness", I realized that being practical means to be physically and mentally active. A practical person faces difficulties and looks for strategies to solve them actively, rather than keeps on criticizing himself or herself personally. During the writing process of the thesis, I encountered a great difficulty in organizing my thoughts and writing them down. I blamed it on my language, intelligence, ability, and lack of external help in writing. These negative thoughts about self-efficacy demotivated me to work on my thesis. After I changed my understanding of "practicality", I stopped criticizing myself and started to focus on looking for practical strategies to solve my problems by myself. When I stopped self-blaming, I started to see what I could not see when I thought of myself negatively.

I gradually noticed one big problem in my ways of working. That is, I didn't narrow down my focus and limit the workload. I ran into different areas at the same time as I had so many interests. As a result, my effort was dispersed while my workload increased. Also, I let myself flow during the literature review, data analysis, and writing, as I was so interested in this topic and I wanted to know what the solutions for my motivation and learning problems were. Without concentration of effort and limitation of my workload, my thesis became such a huge task that I could not handle. It seemed that it would never end no matter how much effort and time I put into it. I felt exhausted and frustrated. Consequently, self-doubt raised and my motivation decreased. My working ability suffered. This made the thesis more difficult to be finished. Then my self-efficacy decreased. It further decreased my motivation and inhibited learning. Clearly, my motivation was caught in a negative feedback loop. The discovery of my working habit helped me to realize that although interest is essential for my motivation, too much interest with poor self-management strategies can disable me to work well, thus decreasing my motivation and interest in return. So, I needed to learn more strategies to control my work in order to make my interest increase my motivation rather than decrease it.

I also realized that I tended to take things personally and criticize myself negatively whenever I encountered difficulties. I would think myself as not intelligent or weak or lazy. This negative thought blocked my sight and made me hesitate to ask for help. Because it's me who caused the problem, only I myself can solve the problem. Asking for help just means I don't want to take responsibility to solve my problem. With this understanding, I would work hard to solve my problems. But, I might work in the wrong way because what I believed as an obvious reason of my problem might not be the real one. For example, I always thought English is one of my big weaknesses while learning in Canada. Easily I assumed my difficulty in writing the thesis was caused by my lack of language proficiency. I blamed myself for not studying English hard and felt hopeless to improve. But after I learned "practice awareness" and started to read books about how to write English essays well with a new attitude, I found that some major problems that I had were actually quite normal among English native speakers. This finding renewed my self-confidence, thus increasing my motivation. More importantly,

this finding triggered me to realize that something I take for granted might not be true – my real problems might not be the one that I thought I had. My working habits and negative thoughts about myself might actually cause me more trouble in writing than my language ability. So, to understand my motivation or learning problem I need to always try to see beyond what I see – to look for what is not obvious instead of being caught in the superficially linear cause-effect relationship. With this understanding, when I reread Fang's words about the feeling of restriction not being from a single class, but actually coming from the whole school environment, I realized that to understand students' words, I must not take their words literally. For example, sometimes one student sounds like s/he is complaining about the restriction in one class, s/he might actually be frustrated by the whole school environment. Thus, to really understand students' perceptions, I must seek the unobvious through the obvious. To achieve it, I should discuss more with other people who might see beyond what I see.

Lastly, through this study, I learned that difficulties are necessary for one's mental health. They also can bring a meaning for humans' lives – to be challenged, and to overcome difficulties. This new understanding of difficulties made me realize that encountering difficulties doesn't mean that I am not capable enough. It just means that life is full of difficulties and they are as normal (and essential) as the air that one needs to breathe. One shall purposefully seek challenges to make one's life meaningful. With this positive interpretation of difficulties, I feel I can think myself more positively and be more comfortable with difficulties.

In conclusion, by doing this study, I put what I have learned about motivation and learning into use in my own learning process. I experienced the decrease and increase of my motivation several times. Now I understand how to enable my motivation to develop and my learning to improve, I need to learn practical strategies to deal with numerous difficulties I might encounter during the process of interest development, and keep on interacting with my environment. Also, the most important thing is that I need to view myself more positively and always try to see beyond what I see.

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Footnotes

[1] The literature about what kind of learning that students value is reviewed in the second part of this chapter, which focuses on students' perceptions.

[2] Doll says, "A transformative curriculum is one in which both the teacher and student(s) grow and develop through interaction with themselves and the texts. It is this sense of all developing through action and interaction that marks a transformative curriculum. Knowledge in a transformative curriculum is not transmitted from knower to known but is created by all through mutual and reciprocal interaction. All learn, all, develop" (Personal correspondence, January 12th, 2005). In a transformative curriculum, both teachers and students learn and develop through doings, reflections, and interactions with each other, with themselves, and with texts. Doll believes a teacher's role in a transformative curriculum is "to keep with the spirit of the transformative curriculum" (Personal correspondence, January 12th, 2005) – s/he sets up a learning structure that is open and aims for new structures or things emerging or developing in the learning process. A transformative curriculum is creative, thus dynamic.

[3] Reward power can be a valuable tool when the teacher lacks referent or expert power, as although it may not actually increase learning, at least it does not retard it (Richmond & McCroskey, 1984).

[4] AIESEC is an old French acronym for "Association Internationale des Etudiants en Sciences Economiques et Commerciales". It means "The Association of International Students for Science, Economics, and Commerce" in English. It used to be an association having a lot of business students. But, now the original meaning of AIESEC has been lost. AIESEC is used as a name for an international student organization, which is open to students from all faculties.

[5] In Chinese, this kind of counsellors is "fudaoyuan". They act as the coordinators, advisors, and supervisors for undergraduate students' academic, personal, and political development. They are supposed to communicate with students frequently, check their thoughts (especially political opinions) and lives, organize student activities, and support students' holistic development.

[6] Cai Yanpei is considered to be the father of Beijing University and had an extremely important influence on Chinese education ("Beida zhi fu Cai Yuanpei", 2004).

Cai became the principle of Beijing University in 1917. He fostered free academic debates and strongly supported scholars of all ideological persuasions in the university (Hayhoe, 1991). Cai believes that only allowing one single thought to dominate or exist cannot prompt academic development ("Beida zhi fu Cai Yuanpei", 2004). Because of Cai's free thought policy, Beijing University became the most active university in China, in both academic and political fields, and a lot of students who graduated from Beijing University became national masters in many different fields and contributed a lot to the Chinese social revolution. Even now, Beijing University is still one of the most famous universities in China.

[7] As teachers can be viewed as authorities having power in a school context, it's possible that teachers' "guidance" can be viewed as a kind of demand that students have to accept. If so, teachers' guidance is also a kind of restriction for students.

[8] The staff member got students' nonverbal feedback through their observations of students' behaviors in their office.

Appendix A

Questionnaire (1st English version)

Personal Information					
Name		Sex		Age	
Post-secondary Educational Experience					
Years (From ... To ...)	School			Major	

Note: All questions can have more than one response. Please specify if you choose the "Others" option. For questions 1, 2, 3, 4, and 5, please note the following two requests.

a) Write down as many items as you can. They can be concrete ones (e.g. Computer 125, Windows XP), or categories (e.g. computer courses, courses related to my future goals, and so on.)

b) For each item please explain **why**. You may either choose some reasons listed below the questions or specify your own reasons corresponding to each item you have stated.

1. What do you enjoy learning in school? Why?

Possible Reasons:

a) It is important to my future.
b) It is connected to my daily life.
c) I can use it immediately.
e) It helps me to understand the world.
f) I already know something about it.
g) It is interesting.
h) I am good at it.
i) It is challenging.
j) I like the teacher.
k) The teacher always gives me positive feedback.
l) I have classmates from whom I can seek help.
m) My friends like it.
n) It is new to me.
o) Others.

2. What do you not enjoy learning in school? Why?

Possible Reasons:

a) It is not important to my future.
b) It is useless now. I cannot see how I can use it.
c) I don't know why I need to study it.
d) I know nothing about it.
e) It is hard for me.
f) I am not interested in the subject.
g) It is too easy. I already know it.
h) It is not my choice. I have to learn it.
i) There are no personal choices or opinions involved in learning process.

j) None of my friends like it.
k) Nobody helps me to learn it.
l) The teacher always criticizes me.
m) The teacher seldom gives me feedback.
n) The class is boring; nothing is new.
o) Others.

3. What do you enjoy learning outside of school? Why?

Possible Reasons:
a) It is important to my future.
b) It is connected to my daily life.
c) I can use it immediately.
d) It helps me to understand the world.
f) I already know something about it.
g) It is interesting.
h) I am good at it.
i) It is challenging.
j) I am controlling my own learning.
k) Supports and feedbacks are available from somebody.
l) My friends like it.
m) It helps my learning in school.
n) Others.

4. What methods or styles of teaching do you like? Why?

Possible Reasons:
a) It makes learning important to my life.
b) It makes learning useful.
c) It makes learning interesting.
d) It makes learning easy.
e) It makes learning challenging.
f) It makes me feel that I am controlling my learning.
g) It makes me feel safe to make mistakes.
h) It helps me to know how well I study and what more I need to study.
i) It makes me feel that I can always find help with my learning.
j) It gives me chance to make friends.
k) I don't know. I just know I can learn better this way.
l) I don't know. I just know I want to learn when the teacher is teaching this way.
m) Others:

5. What methods or styles of teaching help you learn? Why?

Possible Reasons:

a) It makes learning important to my life.
b) It makes learning useful.
c) It makes learning interesting.
d) It makes learning easy.
e) It makes learning challenging.
f) It makes me feel that I am controlling my learning.
g) It makes me feel safe to make mistakes.
h) It helps me to know how well I study and what more I need to study.
i) It makes me feel that I can always find help with my learning.
j) It gives me chance to make friends.
k) I don't know. I just know I can learn better this way.
l) I don't know. I just know I want to learn when teacher is teaching this way.
m) Others:

6. In what kinds of situations do you learn well?

☐ When I can see the connections between the learning content and my personal life and the social reality.
☐ When I learn something I am interested in.
☐ When I learn something about which I already know a little.
☐ When I learn something that I can use to produce results quickly.
☐ When I learn by doing.
☐ When I learn something easy for me.
☐ When I learn something very difficult for me.
☐ When I learn something a little bit difficult for me.
☐ When I can learn in my own way.
☐ When I can negotiate with teachers to adjust the learning according to my needs.
☐ When I can get support and feedback from teachers and peers.
☐ When I learn through cooperative activities.
☐ When I have a lot of discussions with teachers and peers.
☐ When I learn something new to me.
☐ When teachers present or repeat the learning content in different ways.
☐ Others:

7. What do you like about school?

☐ It helps me to become knowledgeable and I can understand the world.
☐ It helps me to know myself better.
☐ It helps me to prepare for my future.
☐ I can make friends.
☐ I can learn new things.
☐ I can create.
☐ Others:

8. When is learning meaningful for you?

☐ When it is needed for my daily life.
☐ When it is necessary for my future goals.
☐ When the learning content is related to my personal interest.

- [ ] When I can use what I learn.
- [ ] When I can see the connections between the learning content and the social reality.
- [ ] When the learning task is not very difficult and I can make progress.
- [ ] When I can personalize my learning.
- [ ] When I have a positive and supportive learning environment.
- [ ] When I learn new things.
- [ ] When I can create something new.
- [ ] Others:

Questionnaire (1st Chinese version)

关于有意义学习的问卷调查表

填表人个人资料					
姓名		性别		年龄	
高等教育经历（请填写所有你受过的高等教育经历）					
时间（从何年到何年）	学校			专业	

说明：以下所有的问题都可以有多个回答。如果你选择了“其他”的选项，请写明具体内容。在回答问题 1，2，3，4 和 5 时，请注意下面两个要求：

1）请尽可能多地列出你所喜欢或者不喜欢的内容，这些内容可以是具体的事物 (例如： Computer 125 课程, Windows XP 等), 或者是一类事物 (例如：计算机课程, 和我的前途有关的课程等) 。

2) 对你列出的内容，请逐一解释原因。你可以在题目下方的原因队列里选择适合的选项，也可以陈述你自己的原因。

1. 你喜欢在学校里学什么？为什么？

可能的原因：

a) 它对我的前途很重要。
b) 它和我的日常生活相关。
c) 我能立即使用所学内容。
e) 它帮助我理解世界.
f) 我对它有一些了解。
g) 它有趣.
h) 我擅长.
i) 有挑战性.
j) 我喜欢教课的老师.
k) 教课的老师总给我反馈意见.
l) 我有同学可以帮助我.
m) 我的朋友都喜欢这个.
n) 对我来说它是新知识.
o) 其他.

2. 你在学校里不喜欢学什么？为什么？

可能的原因：

a) 对我的前途不重要。
b) 所学内容现在没用。
c) 我不知道为什么我要学习它。
d) 我对它没有任何了解。
e) 对我来说，它太难了。
f) 我对它不感兴趣。
g) 太容易了，我都会了。
h) 不是我自己选的，我不得不学。

i) 在学习过程中没有个人选择和观点的参与。
j) 我的朋友都不喜欢它。
k) 没有人帮助我。
l) 老师老是批评我。
m) 老师对我没有任何反馈。
n) 太闷了，没有什么新东西。
o) 其它。

3. 你在校外喜欢学习什么？为什么？

可能的原因：
a) 它对我的前途很重要。
b) 它与我的日常生活相关。
c) 我可以立刻使用所学内容。
d) 它有助于我了解世界。
f) 它是我的兴趣。
g) 我擅长.
h) 有挑战性.
i) 我能控制自己的学习.
j) 有人给我支持和反馈。
k) 我的朋友喜欢它。
l) 对我来说，它是新知识。
m) 它有助于我校内的学习。
n) 其他。

4. 你喜欢什么样的教学方式或风格？ 为什么？

可能的原因：
a) 它使学习变得很重要。
b) 它使学习变得有用。
c) 它使学习变得很有趣。
d) 它使学习变得容易。
e) 它使学习变得有挑战性。
f) 它使我感到我可以控制自己的学习。
g) 它使我不怕犯错误。
h) 它使我知道自己学得如何以及还有哪些需要学习。
i) 它使我感到随时都可以找到帮助。
j) 它给我提供了结交朋友的机会。
k) 我不知道，我只知道老师这样教时，我学得好些。
l) 我不知道，我只知道老师这样教时，我想学。
m) 其他。

5. 什么样的教学方式或者风格有助于你的学习？ 为什么？
可能的原因（同上题）

6. 在那种情况下你学得好？

☐ 当我可以看到所学内容与我个人生活以及社会现实的联系的时候。
☐ 当我学自己感兴趣的东西的时候。
☐ 当我学一些我已经有所了解的东西的时候。
☐ 当我能很快地看到学习成果的时候。
☐ 当我可以从具体实践中学习的时候。
☐ 当我学习一些很简单的东西的时候。
☐ 当我学习一些很难的东西的时候。
☐ 当我学习一些稍微有些难度的东西的时候。
☐ 当我可以用我自己的方式学习的时候。
☐ 当我可以和老师协商，使学习能按我个人需要来进行调整的时候。
☐ 当我可以从老师和同学处获得帮助和反馈意见的时候。
☐ 当我以合作的方式与他人一起学习的时候。
☐ 当我可以和老师和同学们有大量讨论的时候。
☐ 当我学新东西的时候。
☐ 当老师用不同的方式展示学习内容的时候。
☐ 其他：

7. 你喜欢学校的什么？

☐ 学校帮助我成为有见识的人，帮助我了解世界。
☐ 学校帮助我了解自己。
☐ 学校帮助我准备未来。
☐ 在学校里，我可以结交朋友。
☐ 在学校里，我可以学习新知识。
☐ 在学校里，我可以创造。
☐ 其他：

8. 什么时候学习对你有意义？

☐ 当学习是日常生活所必需的时候。
☐ 当学习是我的前途需要的时候。
☐ 当学习内容是与我个人兴趣有关的时候。
☐ 当我可以运用我所学知识的时候。
☐ 当我能看到所学知识和社会现实之间的联系的时候。
☐ 当学习内容不太难，而且我可以进步的时候。
☐ 当我能使学习个人化的时候。
☐ 当我有一个积极且支持的环境的时候。
☐ 当我学习新知识的时候。
☐ 当我可以创造新事物的时候。
☐ 其他：

Appendix B

Questionnaire (2nd English version)

Personal Information					
Name		Sex		Age	
Post-secondary Educational Experience					
Years (From ... To ...)	School			Major	

Notes:

a) For questions 1, 2, 3, 4, and 5, please write down as many items as you can. They can be concrete ones (e.g. Computer 125, Windows XP), or categories (e.g. computer courses, courses related to my future goals, and so on.). And for each item please explain why.

b) For questions 6, 7 and 8, some examples are provided as reference.

1. What do you enjoy learning in school? Why?

2. What do you not enjoy learning in school? Why?

3. What do you enjoy learning outside of school? Why?

4. What methods or styles of teaching do you like? Why?

5. What methods or styles of teaching help you learn? Why?

6. In what kinds of situations do you learn well?

For example:

When I can see the connections between the learning content and my personal life and the social reality.

When I learn something I am interested in.

7. What do you like about school?

For example:

It helps me to become knowledgeable and I can understand the world.

I can make friends.

8. When is learning meaningful for you?

For example:

When it is needed for my daily life.

When it is necessary for my future goals.

Questionnaire (2nd Chinese version)

关于有意义学习的问卷调查表

填表人个人资料					
姓名		性别		年龄	
高等教育经历（请填写所有你受过的高等教育经历）					
时间（从何年到何年）		学校		专业	

关于填写调查表的说明：

1） 回答问题 1 - 5 时，请尽可能多地列出你所喜欢或者不喜欢的内容，这些内容可以是具体的事物 (例如： Computer 125 课程, Windows XP 等), 或者是一类事物 (例如：计算机课程, 和我的前途有关的课程等) 。对你列出的内容，请逐一解释原因。

2） 回答问题 6 - 8 时，可参看给出的例子。

1. 你喜欢在学校里学什么？为什么？

2. 你在学校里不喜欢学什么？为什么？

3. 你在校外喜欢学习什么？为什么？

4. 你喜欢什么样的教学方式或风格？ 为什么？

5. 什么样的教学方式或者风格有助于你的学习？ 为什么？

6. 在什么情况或者条件下你学得好？

例如：

当我可以看到所学内容与我个人生活以及社会现实的联系的时候；

当我学自己感兴趣的东西的时候。

7. 你喜欢学校的什么？

例如：

学校帮助我成为有见识的人，帮助我了解世界；

在学校里，我可以结交朋友。

8. 什么时候学习对你有意义？

例如：

当学习是日常生活所必需的时候；

当学习是我的前途需要的时候。

Appendix C

Questionnaire (3rd English version)

Personal Information					
Name		Sex		Age	
Post-secondary Educational Experience					
Years (From ... To ...)		School		Major	

Notes:
For questions 1, 2, 3, 4, and 5, please write down as many items as you can. They can be concrete ones (e.g. Computer 125, Windows XP), or categories (e.g. computer courses, courses related to my future goals, and so on.). And for each item please explain why.

1. What do you enjoy learning in school? Why?

2. What do you not enjoy learning in school? Why?

3. What do you enjoy learning outside of school? Why?

4. What methods or styles of teaching do you like? Why?

5. What methods or styles of teaching help you learn? Why?

6. In what kinds of situations do you learn well?

7. Do you like about school? Why?

8. When is learning meaningful for you?

Questionnaire (3rd Chinese version)

关于有意义学习的问卷调查表

填表人个人资料					
姓名		性别		年龄	
高等教育经历（请填写所有你受过的高等教育经历）					
时间（从何年到何年）	学校		专业		

关于填写调查表的说明：
回答问题 1 - 5 时，请尽可能多地列出你所喜欢或者不喜欢的内容，这些内容可以是具体的事物 (例如： Computer 125 课程, Windows XP 等), 或者是一类事物 (例如：计算机课程, 和我的前途有关的课程等) 。对你列出的内容，请逐一解释原因。

1. 你喜欢在学校里学什么？为什么？

2. 你在学校里不喜欢学什么？为什么？

3. 你在校外喜欢学习什么？为什么？

4. 你喜欢什么样的教学方式或风格？ 为什么？

5. 什么样的教学方式或者风格有助于你的学习？ 为什么？

6. 在什么情况或者条件下你学得好？

7. 你喜欢学校吗？为什么？

8. 什么时候或者情况下学习对你有意义？

Appendix D

Interview Questions for Students (1st English version)

1. Why did you still come to Canada for a post-secondary degree, which is similar to the one you have already had a chance to get or you have already got in China?
2. Please compare the learning experiences in the Chinese and Canadian post-secondary education systems and tell me what experiences you like and dislike.
3. Is learning in Canada meaningful for you? Why?

3a. If learning in Canada is meaningful for you, then between in-school learning and out-of-school leaning, which one contributes to it more?
(Note: In-school learning refers to the study of school courses. Out-of-school learning refers to learning something that is not required by school, such as martial arts, photography, life skills, and so on.)

4. Please describe an in-school learning experience that you like and tell me how you felt at that time and why you like it.
5. Please describe an out-of-school learning experience that you like and tell me how you felt at that time and why you like it.
6. What kind of education do you want your school to provide for you (including school environment, policy, and pedagogy)?

Interview Questions for Students (1st Chinese version)
访谈问题

1. 为什么在你已有机会在中国国内接受高等教育的情况下（或者你已经在中国国内完成大专/大学的高等教育之后），还到加拿大来进修一个类似的高等学历？
2. 请比较你在国内与国外高等教育里的学习经验，分别谈谈在两种教育体系下，有什么是你喜欢的和不喜欢的。
3. 对你来说，留学加拿大有意义么？为什么？

3a. 如果留学加拿大对你有意义，那么你认为，是校内学习还是校外学习对此贡献大呢？
(注：校内学习是指学校里规定的学习内容，校外学习指非学校指定的学习，例如，学习武术、摄影或者一些具体生活技能的学习等)

4. 请描述一个你所喜爱的校内学习的经历，并说说你当时的感受以及你喜欢的原因。
5. 请描述一个你所喜爱的校外学习的经历，并说说你当时的感受以及你喜欢的原因。
6. 你希望你的学校给你提供什么样的教育（包括教学环境、制度和方式等）？

Appendix E

Interview Questions for Students (2nd English version)

1. Why did you still come to Canada for a post-secondary degree, which is similar to the one you have already had a chance to get or you have already got in China?
2. Please compare the learning experiences in the Chinese and Canadian post-secondary education systems and tell me what experiences you like and dislike.
3. Is learning in Canada meaningful for you? Why?

3a. What effect does the living experience during your school years in Canada have on your study?

4. Please describe an in-school learning experience that you like and tell me how you felt at that time and why you like it.
5. Please describe an out-of-school learning experience that you like and tell me how you felt at that time and why you like it.
6. What kind of education do you want your school to provide for you (including school environment, policy, and pedagogy)?

Interview Questions for Students (2nd Chinese version)

访谈问题

1. 为什么在你已有机会在中国国内接受高等教育的情况下（或者你已经在中国国内完成大专/大学的高等教育之后），还到加拿大来进修一个类似的高等学历？
2. 请比较你在国内与国外高等教育里的学习经验，分别谈谈在两种教育体系下，有什么是你喜欢的和不喜欢的。
3. 对你来说，留学加拿大有意义么？为什么？

3a. 你认为留学期间的生活经历对你的学习有什么影响？

4. 请描述一个你所喜爱的校内学习的经历，并说说你当时的感受以及你喜欢的原因。
5. 请描述一个你所喜爱的校外学习的经历，并说说你当时的感受以及你喜欢的原因。
6. 你希望你的学校给你提供什么样的教育（包括教学环境、制度和方式等）？

Appendix F

Interview Questions for Student Services Staff

1. What kind of services does your office provide (especially to Chinese international students)?
2. In what kind of situations do Chinese international students come for your services?
3. How do your services influence them?
4. What is the future plan of your office?

Appendix G

Table 1

Student Profiles

Name	Age	Sex	Former major	Present major	Number of terms in Chinese university or college
Tian	23	M	Transportation Management	Economics	4
Ping	22	F	English	Economics	1
Yan	24	F	Hotel Management (college program)	Economics	6 (Got a college degree)
Mei	21	F	Computer (college program)	Computer & Statistics	2
Kong	25	M	Business Law	Economics	8 (Got a bachelor degree)
Xian	22	F	Plant Protection	Economics	2
Guan	22	M	International Business	Economics	2
Hua	24	F	Industry and Business Management	Business	4
Fang	22	F	Industry and Business Management	Economics	3
Ding	24	M	Computer	Economics	3

Appendix H

Table 2

Matrix Sample in Data Analysis

Pressure			
Course work	Grade requirement of graduation and admission	Tuition fees & parents' expectations	Other learners
国内的考试是这样，国内没什么考试，考试不是很多，或者说也就是小考。[考试时候]大家之间相互，相互帮帮忙，考试偷看一下，基本也就过了。Final 这样的考试，也是考试前一个月能看看，这是学习好的学生，考试前一个月开始准备，学习差的学生，那就是考试前两个星期或者两三天看看，那就不错了。国外呢，加拿大这种我就感觉不一样。我在这边学习，我就感觉到，我选 6 门课嘛，进去之后，基本上考试是经常有，而且全要靠你自己去学，必须自己去看书。你不看书，考试也考不到高分。感觉在这边学，压力比较大些。(Tian, 13-18)	那国外[毕业文凭]和分数有关，你就要每时每刻地抓好，对吧？对。国外要拿 honor, 没门必须要拿 B-以上，象一个课一个 midterm 占 30%，一个考不好，B 就很难保证。B 保证不了，我这个学位拿不上。所以就[比较努力？]（Tian, 87-89）		[这里]不只是考试多，那种学习气氛上，还是压力比较大。看到你旁边的，[这里的]图书馆经常基本上都是满的，还是比较[感觉压力大]。国内也去过图书馆，好像不到考试的时候，平常没什么人。借书都是借小说看. (Tian, 47-48) 积极的群体，能给自己动力，有时候，自己的动力不能持续很久的时候，或者说，一放松，如果没有这个群体的话，放松就放松了，没有继续学习，其实放松下来，再紧张上去，还需要一段时间。这种积极可以来自于同学或老师？对。就是你刚才说老师很有煽动性，就是很有积极性？对。(Tian, 359-363)
[国内]大一，相对来说，是没有什么压力。反正比高中时候轻松很多了...因为大学毕竟不像高中，有老师天天看着你上自习啊，从早上到晚上那样啊。只是安排几个课程，让你去学一下。都比较基础，简单的东西。我觉得学着也不是很费劲。(Ping, 438-440)	因为当时刚刚从高中上来以后，因为高中很紧，考试什么的，都跟你排成绩啊什么的，所以你觉得考不好很丢人。大学里没人管你，只要你及格就行了。谁还会去学呀？就是说本来紧了一段时间之后，松开以后就那什么[不学]了。(Ping, 463-465)	然后出国以后，学费有压力，太贵了。本身父母供你出来也不是很容易，要好好学习，至少你得对得起父母吧。(Ping, 831-832)	然后本身我们还住寝室，大学里面不是分寝室嘛，然后住在寝室里面大家都喜欢玩什么的。如果别人玩，你自己学的话，你肯定也学不进去。(Ping, 435-436)