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#### The Introduction of Entrepreneurship Education to School Leavers in a Vocational Institute

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#### Abstract

In this fast-changing society, the youth unemployment rate is high and the knowledge learnt in schools is inadequate to equip students to compete in the competitive marketplace. For many school leavers who do not have the marks to go to university, a vocational institute is an obvious choice for them to continue their studies. In this situation, would it be possible for the institutes to provide entrepreneurship training programs for this group of young people? Do these students have the right kind of education credentials to increase their employability or to start their own business? This study attempts to investigate whether Entrepreneurship Education should be provided to business students in a vocational institute as part of their study program. The results suggest that Entrepreneurship Education would have a positive impact on the strength of the students' entrepreneurial spirit in terms of starting-up a new business, and a high percentage of students acknowledged that the entrepreneurial knowledge they had acquired would be useful to them.

Keywords: entrepreneurship education; vocational institutes; Hong Kong; school leavers

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**INTRODUCTION** 

The changing workplace environment is providing many reasons for entrepreneurship education. Self-employment is an on-going trend as more organizations contract out work rather than employing permanent employees to do the tasks. Big firms are unbundling their various activities and farming them out to small firms that are better at creating profit. Public services are being privatized as governments seek to cut spending and decrease financial deficits. People need to be more flexible and creative regarding their working livelihoods in order to cope with this changing labor market. In order to cope with this changing labor market, people need to be more flexible and creative regarding their working livelihoods.(please delete this sentence) Furthermore, they need to be enterprising and able to work autonomously, take responsibility and make decisions, work in small teams and continually update their job skills. Entrepreneurship education could play an important role in providing training in these multiple skills that are characteristic of these new work trends, and the education system must be responsible for training enough well-equipped people to sustain the development of the economy.

University education is seen to be a vehicle for students to get jobs, but only around 18% of the youths in Hong Kong can find a place in tertiary institutions. At the same time, the education policy of the main stream education system does not allow the majority of students to stay in school longer because their academic performance is not good enough for them to be promoted to secondary six, and they cannot repeat the same year again and again due to limited educational resources. Quite a number of those who cannot go further in their education study in vocational institutes, so it would be a good idea to introduce entrepreneurship education in vocational institutes.

#### The Importance of Entrepreneurship Education

Educators, policymakers, employers, parents and students started to become aware of the gaps between school and work. They found that "neither students nor teachers [had] a solid understanding of the links between school and work" (Rubin, 1996, p.7). Students and teachers had no idea, or limited knowledge, about how the skills learned at school, like algebra skills, might be applied to the workplace; they knew little about what skills employers expected their employees to possess (Rubin, 1996; Cheung and Lewis, 1998). It was also noted that the existing business education was not relevant to the business world, and this situation applies both in Hong Kong and the West (Brawer, 1997; Cheung, 1997). In view of this situation, many countries started to develop entrepreneurship education.

Entrepreneurship education is significant in many aspects. It can provide students with an understanding of business – its purposes, its structure, its interrelationship with other segments of the economy and society. Many studies have noted that an entrepreneurship course has a positive impact on students' views of entrepreneurship (Mohan-Neill, 2001; Waldmann, 1997; Kolvereid and Moen, 1997; Cheung, 2008a).

Entrepreneurship education focuses on life. There is a debate in the literature as to whether entrepreneurship education should be concerned more with venture creation and business management, or with developing a set of personal attributes and skills—or, in the vocabulary of Kirby (2004), whether one should educate *about* entrepreneurship or educate *for* it. Traditionally, it has been thought that entrepreneurship education is about teaching students how to start a business, create a business plan, etc. More recently, however, it has been recognized that such skills are essential but not sufficient to make a successful entrepreneur (Rae, 1997). A successful entrepreneur must have knowledge of the business world, but must also possess a set of generic attributes, skills and behaviours—such as those related to communication, creativity, and problem-solving—that are important to life as well as business. Therefore, if entrepreneurship education is conducted with a view to promoting students' personal attributes, it can have a substantial impact on students' careers, whether or not they plan to become entrepreneurs.

## The Study

Before introducing a new subject, educators will definitely want to know what the attitudes of students to the proposed subject are. The aim of this study was to investigate whether Entrepreneurship Education should be provided to business students in this institute as part of their study program. The study was conducted using quantitative research techniques with the application of narrative description, and the interpretation and statistical analysis of numeric data. As this study focuses on Entrepreneurship Education in an institute for secondary five school leavers in Hong Kong, a case study research approach was employed to investigate the importance to these particular students of studying Entrepreneurship Education. The study also investigated entrepreneurial spirit and students' attitudes towards entrepreneurship education, and their perceptions of entrepreneurship skills and other work-related skills.

# The Institute

The institute mainly provides vocational programs for secondary school leavers. Recently, the institute has been undergoing a program revolution, which calls for some elements of Entrepreneurship Education to be added to its existing business programs. Although educators know that Entrepreneurship Education is important for the economy, there was no information on what students thought about this subject. Understanding students' perceptions of Entrepreneurship Education and how they measure their knowledge in this area and in other work-related skills would assist the institute in planning its programs.

# The Students

Three groups of students participated in this study. The first group was a class of thirty-five students in the first year of a two-year Business Studies Program. The second group was a class of thirty-eight students in a one-year Commercial Studies Program. The third group was a class of thirty-seven students in a Hotel Business Studies Program.

## **Development of Questionnaires**

The questionnaire was designed with reference to the Gallup Survey (1994), Waldmann (1997), and the Education Department Bureau (EDB) (2000), and was divided into four sections. Section A required personal data concerning gender, work experience and program information only. Section B contained a series of specific attributes in which students were asked to indicate a level of agreement regarding their attitudes to entrepreneurship and entrepreneurial spirit. Section C concerned the students' perceptions of their own entrepreneurial skills. Section D covered the students' general work-related skills.

Except for the personal information section, all sections in the questionnaire employed a five-point Likert scale instrument to assess attitudes towards a topic by presenting a set of statements about the topic and asking

respondents to indicate for each whether they strongly agreed, agreed, were neutral, disagreed or strongly disagreed. The questions were examined for bias, sequence, clarity and validity, and were tested in pilot studies to determine their usefulness and reliability.

# **Data Analysis**

The survey results were analyzed using SPSS on a quantitative basis. Furthermore, descriptive and inferential statistics were used in this study. A paired samples t-test was used to determine whether there was a difference in mean scores for different questions. An independent sample t-test was used to assess whether gender affected students' attitudes to entrepreneurship. Correlations analysis was also used to measure the relationship between students' intention to start-up a business and their standard of knowledge and understanding of starting and managing a business. An exploratory factor analysis of any hidden dimensions underlying the attributes was also employed.

## Validity and Reliability Measurement

The questionnaire was developed with reference to many previous studies. Before giving the questionnaire to the students, a mini pilot study, using the survey questionnaires, was conducted with a small group of colleagues and friends to test the material covered for the wording of the questions and the adequacy of the sample of items.

To ensure data validity, about one hundred students were invited to participate in the survey. Reference data were also collected from twenty entrepreneurs in different industries. This reference data could be indicators of the criterion that the test was believed to predict. These two sets of data were comparable, and cross-referenced and cross-validated to ensure their validity.

# **Data Analysis and Discussion**

# Demographic Characteristics of the Respondents

Questionnaires were dispatched to all 110 sampled students at the institute. A total of 105 questionnaires were returned. Among these 105 responses, seven sets of questionnaires contained incomplete data and were removed from the analysis. The quantitative analysis is based on 98 questionnaires (n = 98). The completed questionnaires received from the three classes of students consisted of 33 from Business Studies students (BS), 34 from Commerce Studies students (CS) and 31 from Hotel Business Studies students (HBS).

# Desire of Students to Start Their Own Business

Question 1 simply asked students whether they had ever seriously considered starting their own business sometime after graduation. Only 24 % of BS students and 23% of HBS students responded positively. This result is low in comparison with other countries, but confirmed the study done in Hong Kong in which only three percent of adults indicated that they wanted to start a business (CUHK, 2005).

Question 2 asked if they would like to start a business if they were unemployed. The response was very positive. The numbers for the three different classes were about 67%, 97%, and 71% for BS, CS and HBS respectively. Although starting a new venture was not the students' first priority, they would want to do so if they were unemployed.

Of particular interest was the change in the desire to start a business as an alternative to unemployment. A paired samples t-test was used to determine whether there was a difference in the mean scores for question 1 and 2. The result is shown in Table 1. The results of the three classes are considered statistically significant as the two-tailed probability for all is 0.000, which is definitely less than 0.05, the significant level.

| Classes | Mean  | <b>Standard Deviation</b> | t-value | Sig. (2-tailed) |
|---------|-------|---------------------------|---------|-----------------|
| BS      | -0.79 | 0.740                     | -6.118  | 0.000*          |
| CS      | -0.41 | 0.557                     | -4.311  | 0.000*          |
| HBS     | -0.74 | 0.729                     | -5.568  | 0.000*          |
| Overall | -0.64 | 0.692                     | -9.192  | 0.000*          |

 Table 1: Result of paired samples t-test for question 1 and question 2

\* Significant at the 0.05 level

(Degrees of freedom BS = 32, CS = 33, HBS = 30 and overall = 97

# Students' Entrepreneurial Spirit and Attitudes towards Entrepreneurship Education

A large proportion of BS students (85%) and CS students (79%) indicated that they intended to have their own business rather than getting a secure and well-paid job, but only less than half (48%) of HBS students said so. This result is shown in Table 2. Perhaps HBS students have a clearer career path than the other two classes of students because the former are more likely to obtain a job in a hotel-related industry after graduation due to the recent more positive employment environment in the hotel industry in Hong Kong.

Although many of the students wanted to achieve success on their own, and wanted to be self-employed and independent, they were not prepared to accept the risks and insecurity that are inherent in entrepreneurship, except the CS students, about 71% of whom indicated that they would accept risk and insecurity in business. However, only around one-third of BS students (33%) and HBS students (38%), respectively were willing to accept risk and insecurity. Nowadays, it seems that young people are usually not clear about what they really want for their careers. They prefer to work for themselves, to achieve their own success, but when they encounter the issues of taking risks and personal responsibility, not many of them are prepared to go further and develop their dreams. Research indicates that the reasons for not taking the opportunities to start their own business are: the difficulty in obtaining finance, lack of knowledge of how to evaluate potential business opportunities, and the lack of knowledge and skills (Botha, *et al.* 2006; Cheung, 2008b). That is why entrepreneurship education is essential as it would enable students to explore these issues before they really encounter difficulties in practice.

Table 2: Percentage and mean scores of students who prefer their own success and accept business risks and insecurity

|                        |         |                       | Percentage | (%)                         |      |                    |
|------------------------|---------|-----------------------|------------|-----------------------------|------|--------------------|
| Attribution Fac        | tors    | Strongly agree/ agree | Neutral    | Strongly disagree/ disagree | Mean | Standard deviation |
| Q 3. Prefer having     | BS      | 84.8                  | 6.1        | 9.0                         | 3.30 | 0.728              |
| own business rather    | CS      | 79.4                  | 20.6       | 0                           | 3.71 | 0.462              |
| than getting a secure  | HBS     | 48.4                  | 51.6       | 0                           | 3.39 | 0.495              |
| and well paid job      | Overall | 71.4                  | 25.5       | 3.1                         | 3.87 | 0.741              |
| Q 4. Accept risks and  | BS      | 33.4                  | 57.6       | 9.0                         | 3.30 | 0.728              |
| insecurity in business | CS      | 70.6                  | 29.4       | 0                           | 3.71 | 0.462              |
|                        | HBS     | 38.7                  | 61.3       | 0                           | 3.39 | 0.495              |
|                        | Overall | 47.9                  | 49.0       | 3.1                         | 3.47 | 0.596              |

This study shows that the importance of entrepreneurship education was recognized as 100% of BS respondents, 97% of CS respondents and 68% of HBS respondents agreed that it was important for them to be taught about entrepreneurship and how to start a business (Table 3). This result is similar to that of the Gallup Survey (1994), where 85% of high school students indicated a desire to learn more about the subject.

Table 3: Percentage and mean scores of students' perceptions of Entrepreneurship Education

| Percentage (%)        |         |                       |         |                             |       |                    |  |  |
|-----------------------|---------|-----------------------|---------|-----------------------------|-------|--------------------|--|--|
| Attribution Factors   |         | Strongly agree/ agree | Neutral | Strongly disagree/ disagree | Mean  | Standard deviation |  |  |
| Q 5. The learning of  | BS      | 100                   | 0       | 0                           | 4.36  | 0.489              |  |  |
| EE is important for   | CS      | 97.0                  | 3.0     | 0                           | 4.21  | 0.479              |  |  |
| starting a business   | HBS     | 67.7                  | 32.3    | 0                           | 3.74  | 0.575              |  |  |
|                       | Overall | 88.8                  | 11.2    | 0                           | 4.11  | 0.572              |  |  |
| Q 6. Knowledge of     | BS      | 93.9                  | 6.1     | 0                           | 4.33  | 0.595              |  |  |
| how to run a business | CS      | 100                   | 0       | 0                           | 4.41  | 0.500              |  |  |
| is useful to me       | HBS     | 71.0                  | 29.0    | 0                           | 3.84. | 0.638              |  |  |
|                       | Overall | 88.8                  | 11.2    | 0                           | 4.20  | 0.625              |  |  |
| Q 7. Would seriously  | BS      | 75.8                  | 24.2    | 0                           | 3.85  | 0.566              |  |  |
| consider starting     | CS      | 76.5                  | 23.5    | 0                           | 3.85  | 0.558              |  |  |
| own business if I     | HBS     | 35.5                  | 61.3    | 3.2                         | 3.32  | 0.541              |  |  |
| learnt how to do it   | Overall | 63.3                  | 35.7    | 1                           | 3.68  | 0.602              |  |  |
| Q 8. Knowledge &      | BS      | 0                     | 42.4    | 57.6                        | 2.36  | 0.603              |  |  |
| skills in starting &  | CS      | 0                     | 17.6    | 82.4                        | 2.15  | 0.436              |  |  |
| managing a business   | HBS     | 9.7                   | 9.7     | 80.6                        | 2.19  | 0.749              |  |  |
|                       | Overall | 3.1                   | 23.5    | 73.4                        | 2.23  | 0.606              |  |  |

Education can help to boost young people's entrepreneurial spirit and business start-up rate (Kourilsky, 1995), but if there is no Entrepreneurship Education in the current secondary curriculum, how can school leavers have the confidence to start-up their own business? As far as promoting entrepreneurial spirit among young people, the education system today probably harms more students than it helps (Kirby, 2004). Also, the system restricts creativity, competence and capability and thus demotivates students and narrows their perspectives (Cheung and Lewis, 1998).

Unfortunately, but not too surprisingly, a very high percentage of students reported that they had poor or very poor knowledge and understanding of starting and managing a business. About 58% of BS students, 82% of CS students and 81% of HBS students reported that they had poor to very poor knowledge and understanding of this aspect. No one in either the BS or the CS class reported that they had at least a good understanding of it. All the mean scores of these three classes were under 2.5, which means that the students' knowledge and understanding of starting a business were less than fair. It seems that all students understood that their weakness in knowledge of how to start a business might prevent them from taking their entrepreneurial dream further.

A paired samples t-Test was used to determine whether a difference in the mean scores for question 1 and question 7 existed. The result is shown in Table 4. The observed two-tailed probabilities for BS and HBS are 0.000 and 0.023, which are both less than 0.05 and, therefore, the test is considered significant at the 0.05 level. However, no significant difference was found for CS at the 0.05 level because the observed two-tailed probability was larger than 0.05. The results implied that if they had confidence in starting and managing a business, both BS and HBS respondents would be happy to try. However, in the case of CS, respondents' intention to start-up a business was equally strong with or without the required knowledge and skills. Under this circumstance, providing students with the chance to study Entrepreneurship Education would help to nurture students' entrepreneurial spirit at least in the case of BS and HBS. Also, more importantly, a high percentage of students (89%) agreed that studying Entrepreneurship Education would be useful to them.

| Table 4: Result of paired | samples t-test for | question 1 | and question 7 |
|---------------------------|--------------------|------------|----------------|
|                           |                    |            |                |

| Classes | Mean  | Standard Deviation | t-value | Sig. (2-tailed) |
|---------|-------|--------------------|---------|-----------------|
| BS      | -0.88 | 0.781              | -6.464  | 0.000*          |
| CS      | -0.18 | 0.576              | -1.787  | 0.083           |
| HBS     | -0.32 | 0.748              | -2.402  | 0.023*          |
| Overall | -0.46 | 0.762              | -5.965  | 0.000*          |

\* Significant at the 0.05 level

(Degrees of freedom BSS = 32, CSS = 33, HBSS = 30 and Overall = 97)

Table 5 indicates that CS students responded more positively to all these attribution factors as a higher proportion of them wanted to start their own business, to be self-employed and independent, to achieve their own success and to be more willing to take risks and face insecurity in running a business, compared to the other two groups of students. They seemed to have a higher aspiration toward entrepreneurship and a positive attitude towards an entrepreneurial spirit. Furthermore, they also had a strong interest in receiving Entrepreneurship Education (97%), and all of them (100%) considered that the knowledge and skills of entrepreneurship would be useful to them. Although their academic performance was supposed to be the lowest of the three classes, they had a clear mind and consistent thinking about entrepreneurship. In contrast, BS students and HBS students had less interest in starting a business. However, in terms of attitudes to Entrepreneurship Education, BS students had a more positive attitude than HBS students. A hundred percent of BS students considered that taking Entrepreneurship Education was important, and 94% of them considered the knowledge and skills of entrepreneurship to be useful to them compared to only 68% and 71%, respectively, of HBS students.

Table 5 Correlations between starting own business and knowledge and understanding of business

|     |                     | BS   | CS   | HBS  | Overall |
|-----|---------------------|------|------|------|---------|
|     |                     | Q.8  | Q.8  | Q.8  | Q.8     |
| Q.1 | Pearson Correlation | .453 | .176 | .183 | .196    |
|     | Sig. (2-tailed)     | .008 | .319 | .325 | .053    |
|     | Ν                   | 33   | 34   | 31   | 98      |

Correlation is significant at the 0.05 level (2-tailed).

The Business Studies Program provides much more in the way of professional training that may make students feel confident in finding a job in an office after graduation. In the past, many graduates pursued their studies to receive

professional training, and so many of these students might see their future in professional development rather than in starting up a business. As mentioned earlier in this paper, the HBS students were expecting to get a job in the hotel industry, and they had more confidence in the future. Perhaps they also liked the field that they were studying. All these factors contributed to the lower entrepreneurial spirit of both BS and HBS students.

#### Students' Perceptions of Entrepreneurial Skills

# a. Personal Attitudes

In general, students valued themselves quite positively, except in the areas of risk-taking and perseverance, where 44% to 59% of students graded themselves as agreeing or strongly agreeing that they possessed these kinds of characteristics (Table 6). Students' perceptions of themselves in this positive manner may help them in their future career development. The mean scores for all the attributes were greater than 3. Of the skills in this section, responsibility and commitment yielded the highest mean scores. Risk-taking and perseverance produced the weakest responses, with only 29% and 26% of students respectively grading themselves as possessing these two characteristics. The mean scores of perseverance were the lowest of all the attributes.

Risk-taking and perseverance are the two most important characteristics of entrepreneurs. Entrepreneurs have to take risks every time they make decisions. A risk-taker possesses entrepreneurial talent and temperament and is more likely to achieve success in entrepreneurship. This risk-taking attribute is very important for a person intending to start a new venture. However, students in this study were not strong in this respect. They tended not to be ambitious with respect to starting-up their own business and tended to want an easy life without too much hardship.

|                       |         |                       | Percentage ( | %)                          |      |                    |
|-----------------------|---------|-----------------------|--------------|-----------------------------|------|--------------------|
| Attribution Fac       | etors   | Strongly agree/ agree | Neutral      | Strongly disagree/ disagree | Mean | Standard deviation |
| Q C1. Responsibility  | BS      | 75.8                  | 24.2         | 0                           | 3.79 | 0.485              |
| and                   | CS      | 64.7                  | 35.3         | 0                           | 3.65 | 0.485              |
| Commitment            | HBS     | 35.5                  | 61.3         | 3.2                         | 3.32 | 0.541              |
|                       | Overall | 59.2                  | 39.8         | 1.0                         | 3.59 | 0.534              |
| Q C2. Ability to work | BS      | 45.5                  | 54.5         | 0                           | 3.45 | 0.506              |
| independently         | CS      | 58.8                  | 38.2         | 2.9                         | 3.56 | 0.561              |
|                       | HBS     | 32.3                  | 67.7         | 0                           | 3.32 | 0.475              |
|                       | Overall | 45.9                  | 53.1         | 1.0                         | 3.45 | 0.520              |
| Q C4. Initiative and  | BS      | 57.6                  | 39.4         | 3.0                         | 3.55 | 0.564              |
| drive                 | CS      | 38.2                  | 58.8         | 2.9                         | 3.35 | 0.544              |
|                       | HBS     | 35.5                  | 61.3         | 3.2                         | 3.32 | 0.541              |
|                       | Overall | 43.9                  | 53.1         | 3.1                         | 3.41 | 0.557              |
| Q C5. Risk-taking     | BS      | 33.3                  | 60.6         | 6.1                         | 3.30 | 0.637              |
|                       | CS      | 22.6                  | 70.6         | 0                           | 3.29 | 0.462              |
|                       | HBS     | 22.6                  | 67.7         | 9.7                         | 3.13 | 0.562              |
|                       | Overall | 28.6                  | 66.3         | 5.1                         | 3.24 | 0.557              |
| Q C6. Receptivity     | BS      | 66.7                  | 33.3         | 0                           | 3.67 | 0.479              |
| and adaptability to   | CS      | 47.1                  | 52.9         | 0                           | 3.47 | 0.507              |
| new ideas             | HBS     | 48.4                  | 48.4         | 3.2                         | 3.45 | 0.568              |
|                       | Overall | 54.1                  | 44.9         | 1.0                         | 3.53 | 0.522              |
| Q C12. Perseverance   | BS      | 21.2                  | 75.8         | 3.0                         | 3.18 | 0.465              |
|                       | CS      | 44.1                  | 44.1         | 11.8                        | 3.32 | 0.684              |
|                       | HBS     | 12.9                  | 54.8         | 32.3                        | 2.81 | 0.654              |
|                       | Overall | 26.5                  | 58.2         | 15.3                        | 3.11 | 0.640              |

Table 6: Percentage and mean scores of students' personal attitude

#### b. Analytical and Problem Solving Abilities

Table 7 shows that students perceived themselves highly especially in relation to creativity, problem-solving and analytical skills. Over 50% of the students agreed that they possessed these skills in these areas, and the mean scores were in general above 3.5. Of these three attribution factors, creativity received the highest mean score of 3.63. Indeed, creativity and problem-solving abilities are significant when evaluating a business opportunity and are also needed in day-to-day business management. They are important attributes for entrepreneurs and are equally important

attributes for employees.

A comparatively lower percentage of students indicated that they possessed the characteristics of decision-making and foresight. The scores in these categories were 39% and 29%, respectively, although the mean scores were still higher than 3. Perhaps students at this stage are not familiar with the concepts of decision-making and foresight; they seldom make decision on their own as they have parents to take care of them. However, young adults need to learn to build-up their self-confidence, not just to prepare for entrepreneurship or employment, but also for survival in life.

|                         |         |                       | Percentage | e (%)                       |      |                    |
|-------------------------|---------|-----------------------|------------|-----------------------------|------|--------------------|
| Attribution Facto       | ors     | Strongly agree/ agree | Neutral    | Strongly disagree/ disagree | Mean | Standard deviation |
| Q C3. Creativity        | BS      |                       |            |                             |      |                    |
|                         | CS      | 78.8                  | 21.2       | 0                           | 3.85 | 0.508              |
|                         | HBS     | 61.8                  | 35.3       | 2.9                         | 3.59 | 0.557              |
|                         | Overall | 48.4                  | 48.4       | 3.2                         | 3.45 | 0.568              |
|                         |         | 63.2                  | 34.7       | 2.0                         | 3.63 | 0.563              |
| Q C7. Problem-solving   | BS      | 39.4                  | 57.6       | 3.0                         | 3.36 | 0.549              |
|                         | CS      | 61.8                  | 38.2       | 0                           | 3.62 | 0.493              |
|                         | HBS     | 54.8                  | 41.9       | 3.2                         | 3.52 | 0.570              |
|                         | Overall | 52.1                  | 45.9       | 2.0                         | 3.5  | 0.542              |
| Q C8. Analytical skills | BS      | 39.4                  | 54.5       | 6.1                         | 3.33 | 0.595              |
|                         | CS      | 58.8                  | 35.3       | 5.9                         | 3.53 | 0.615              |
|                         | HBS     | 54.8                  | 38.7       | 6.5                         | 3.52 | 0.677              |
|                         | Overall | 51.0                  | 42.9       | 6.1                         | 3.46 | 0.629              |
| Q C9. Decision-making   | BS      | 24.2                  | 75.8       | 0                           | 3.24 | 0.435              |
|                         | CS      | 55.9                  | 44.1       | 0                           | 3.56 | 0.504              |
|                         | HBS     | 35.5                  | 64.5       | 0                           | 3.35 | 0.486              |
|                         | Overall | 38.8                  | 61.2       | 0                           | 3.39 | 0.490              |
| Q C10. Foresight        | BS      | 15.2                  | 69.6       | 15.2                        | 3.00 | 0.559              |
| -                       | CS      | 41.2                  | 55.9       | 2.9                         | 3.38 | 0.551              |
|                         | HBS     | 29.0                  | 58.1       | 12.9                        | 3.16 | 0.638              |
|                         | Overall | 28.6                  | 61.2       | 10.2                        | 3.10 | 0.598              |

Table 7: Percentage and mean scores of students' analytical and problem- solving abilities

# c. Students' Perceptions of Other Work-Related Skills

In this section, students were asked to grade themselves regarding other work-related skills: communication skills, collaboration skills, inter-personal skills, information and technology skills, numeracy skills, study skills and ethics in general. The results are shown in Table 8, and it is noted that respondents rated their work-related skills highly. Over 60% of students indicated that they possessed almost all the attributes, with the exception of study skills: only about 18% of students had confidence in their study skills. This poor perception of their study skills is understandable because almost all of the students had previously had poor academic performance. This previous experience had reduced their confidence in their study skills. Nevertheless, many teachers in this institute believe that many of their students are teachable and willing to learn. Some of the students were expecting to achieve good result in the year-end examinations.

The results received in regard to collaboration skills and inter-personal skills were very similar to each other. The researcher observed that the relationship between students and teachers in this institute was more like that of friends than that of teachers and students. The students, who had completed their education to secondary five level in other schools, had reached a more mature level by the time they were studying in this institution. Hence, there was usually mutual respect between students and teachers. The researcher believes that as students become more mature, they will perform at an even higher level in this inter-personal area.

Not too surprisingly, as they had all studied computer applications in their current programs, students graded themselves as having good information technology skills. Some students had also studied Computer Studies during their secondary education. All the students had confidence in their information technology skills. It is essential that students have this computer knowledge, which will enable them to continue with self-learning in their future working life.

An understanding of moral obligations and responsibilities associated with economic activities and daily life are important. Furthermore, an awareness of the common moral issues and dilemmas that can occur while conducting a business are also an important part of business education for students. Business students should be educated to have a moral sensitivity, such as caring about the influence of business actions on other affected parties. The results from the questionnaire survey indicated that about three out of every four students (77%) agreed that they had a sense of ethics. However, they may not have the real life experience in dealing with business issues, and it is important that more case studies dealing with business ethics should be used to familiarize them in real life practice.

|                            |         |                       | Percentage ( | %)                          |      |                    |
|----------------------------|---------|-----------------------|--------------|-----------------------------|------|--------------------|
| Attribution Factors        | S       | Strongly agree/ agree | Neutral      | Strongly disagree/ disagree | Mean | Standard deviation |
| Q D1. Communication        | BS      | 72.7                  | 27.3         | 0                           | 3.76 | 0.502              |
| skills                     | CS      | 73.5                  | 26.5         | 0                           | 3.74 | 0.448              |
|                            | HBS     | 35.5                  | 58.0         | 6.5                         | 3.29 | 0.558              |
|                            | Overall | 61.2                  | 36.8         | 2.0                         | 3.60 | 0.551              |
| Q D2. Collaboration skills | BS      | 81.8                  | 18.2         | 0                           | 3.85 | 0.442              |
|                            | CS      | 82.4                  | 17.6         | 0                           | 3.85 | 0.436              |
|                            | HBS     | 64.5                  | 35.5         | 0                           | 3.65 | 0.485              |
|                            | Overall | 76.5                  | 23.5         | 0                           | 3.79 | 0.460              |
| Q D3. Inter-personal       | BS      | 81.8                  | 15.2         | 3.0                         | 3.79 | 0.485              |
| skills                     | CS      | 76.5                  | 23.5         | 0                           | 3.79 | 0.479              |
|                            | HBS     | 64.5                  | 32.3         | 3.2                         | 3.61 | 0.558              |
|                            | Overall | 74.5                  | 23.5         | 2.0                         | 3.73 | 0.509              |
| Q D4. IT skills            | BS      | 72.7                  | 24.3         | 3.0                         | 3.79 | 0.650              |
|                            | CS      | 64.7                  | 32.4         | 2.9                         | 3.65 | 0.597              |
|                            | HBS     | 61.3                  | 35.5         | 3.2                         | 3.65 | 0.661              |
|                            | Overall | 66.3                  | 30.6         | 3.1                         | 3.69 | 0.633              |
| Q D5. Numeracy skills      | BS      | 57.6                  | 42.4         | 0                           | 3.58 | 0.502              |
|                            | CS      | 41.1                  | 44.1         | 14.8                        | 3.29 | 0.760              |
|                            | HBS     | 41.9                  | 41.9         | 16.2                        | 3.26 | 0.720              |
|                            | Overall | 46.9                  | 42.9         | 10.2                        | 3.38 | 0.681              |
| Q D6. Study skills         | BS      | 24.2                  | 63.6         | 12.2                        | 3.12 | 0.600              |
|                            | CS      | 14.7                  | 61.8         | 23.5                        | 2.94 | 0.694              |
|                            | HBS     | 16.1                  | 67.7         | 16.2                        | 3.00 | 0.577              |
|                            | Overall | 18.3                  | 64.3         | 17.4                        | 3.02 | 0.626              |
| Q D7. Ethics               | BS      | 81.8                  | 15.2         | 3.0                         | 3.91 | 0.631              |
|                            | CS      | 79.4                  | 20.6         | 0                           | 3.91 | 0.570              |
|                            | HBS     | 71.0                  | 29.0         | 0                           | 3.77 | 0.560              |
|                            | Overall | 77.5                  | 21.5         | 1.0                         | 3.87 | 0.586              |

Table 8: Percentage and mean scores of students' other work-related skills

### CONCLUSION AND IMPLICATIONS FOR FURTHER RESEARCH

Entrepreneurship Education is a well-established subject both at university and high school levels in many countries, but not in Hong Kong, and it is appropriate for this vocational institute to provide to those students who cannot continue their studies in tertiary institutions a chance to acquire entrepreneurial knowledge.

This study confirms that students in this institute would like to study Entrepreneurship Education as part of their current business studies programs. Moreover, they would have more confidence both in starting up a business and in working in business if they were equipped with entrepreneurial knowledge. As indicated by the literature review, Entrepreneurship Education can make a contribution to both promoting students' entrepreneurial spirit and enriching students' entrepreneurial skills and other work-related skills. Although it would be difficult for a student to start a new business straight after graduation, even if he or she had received Entrepreneurship Education, it is still worthwhile to teach students the related skills because Entrepreneurship Education could not only stimulate students' entrepreneurial spirit, but also enable students to be more competent in career development.

Furthermore, Entrepreneurship Education could develop students' generic skills. Secondary education has until now not emphasized the development of students' generic skills, and the implementation of Entrepreneurship Education in business programs would enable business students to acquire these essential generic skills.

This study provides for interested parties some preliminary ideas on the subject of Entrepreneurship Education. The attitudes of students towards entrepreneurship and Entrepreneurship Education could be further studied in a larger-scale and more detailed research project.

The participants of this study were from one particular vocational institute, and the results may be limited only to the possibility of having Entrepreneurship Education in this institute. No comparison has been made with students in other vocational institutes. A comprehensive study of more students in different institutes may collect stronger evidence about whether the introduction of Entrepreneurship Education in business programs is possible.

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