INTEGRATING ENTREPRENEURSHIP AND ACCOUNTING THROUGH ONLINE STORE

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Abstract: Integrating Entrepreneurship and Accounting through Online Store: The separateness of the educational process for entrepreneurship students can be problematic in the area of accounting. The paper intends to build integrated conceptual model of entrepreneurship and accounting curriculum to equip students to be innovator entrepreneurs, to investigate the level of entrepreneurial intentions among students, and to analyze students’ online store project in exploring online business especially in accounting area. As an explorative research, this study was conducted through reviewing available literature and/or data, questionnaires among 50 students, in-depth interviews, and integrated students’ project. As results, various ideas of creative and innovative model in entrepreneurship and accounting learning process can be formed for cross-curricular development.

Key words: entrepreneurship, accounting, experiential learning, international school.
make an outright purchase or rent; whether prices should be increased or not as a result of increase in overhead costs; and more. To answer these questions require information generated by accounting process.

Refer to the literature in this area reveals that most of the components of consumer behavior theory have been applied to the study of online consumer behavior. However, the application is not as straightforward as simply borrowing the components and applying them. There are still significant differences between offline and online consumer behavior. For example, Vijayasagarathy (2001) integrated the web specific factors (online shopping aid) into the theory of reasoned action (TRA) to better explain consumer online shopping behavior. Song and Zahedi (2001) built on the model of the planned behavior (TPB) and examined the effects of website design on the adoption of Internet shopping. Moreover, a study by Andrade (2000) was sponsored by the Accounting Education Change Commission (AECC) to look into the accounting education curriculum. Based on his findings, recommended making the accounting education issues more attractive to encourage and motivate students at the introductory accounting level through technology aspects. A review of accounting and entrepreneurship research reveals that the scope of published studies is rather broad, the studies appear relatively fragmented with contradictory results, and only very few prior studies (e.g., Jarvenpaa and Todd 1996, Koufaris et al. 2001) have attempted to systematically review and develop a framework for the study of this important research area.

This exploratory study was conducted to address the current gap in entrepreneurship education and accounting research by answering the following questions: (1) What is the conceptual model of integrated entrepreneurship and accounting curriculum at KIS? (2) What is the level of entrepreneurial intention among students? and (3) What lessons can be learned as a practical implication from students’ project on accounting through online store named B’shop at entrepren.webnode.com, an area where empirical research is much needed?

The literature has failed to come up with one specific definition which totally describes entrepreneurship. Various definitions have emerged in an attempt to explain entrepreneurship. According to Sathiabama (2010) entrepreneurship is a dynamic process of creating wealth by individuals or groups of individuals. Rwigema et al. (2004) define entrepreneurship as the process of conceptualizing, organizing, launching and through innovation, nurturing a business opportunity into a potentially high growth venture in a complex and unstable environment. Entrepreneurship is a vehicle to economic growth, success and prosperity. Herrington et al. (2009) point out that an entrepreneur is one that shifts economic resources out of an area of low productivity into an area of higher productivity and greater yield. An entrepreneur is one who organizes, manages and assumes the risk of a business enterprise. Although many studies assert that entrepreneurs are different from non-entrepreneurs, there is no unified definition of entrepreneurship. Gartner (1985) attempted to find differences in personality and backgrounds that are fundamentally different from those of non-entrepreneurs and that each entrepreneur has his/her unique motivation, goals, and talents for venture creation according to his/her unique background.

According to Morrison (1999), the profile of an entrepreneur is one who: (1) is intelligent and analytical, (2) is an effective risk manager and a networker, (3) possesses a strong set of moral, social and business ethics, (4) exhibits a basic trader’s instinct, and (5) is dedicated to life-long learning in many forms. The talents included in Morrison’s definition are important requirements for becoming successful entrepreneurs in the knowledge era. Lee and Peterson (2000) state that even those individuals who are motivated by such factors as financial rewards, achievement, social, career, and individual fulfillment need a national culture that supports and encourages entrepreneurial activity. Watson, Hogarth-Scott and Wilson (1998) and Morrison (1999) studied that entrepreneurial spirit needs appropriate social and cultural background to initiate motives for venture creation and aspiration for excellence in various academic areas in order to create successful venture. Watson et al. (1998), Morrison (1999), and Lee and Peterson (2000) agree that great entrepreneurs do not grow by themselves, but that they are products of entrepreneurship-oriented societies and cultures.

Pihie (2009) stated that entrepreneurship can be measured in two ways: Actual entrepreneurship (i.e. people that have ac-
ually started business) and entrepreneurial intention or latent entrepreneurship (i.e., people that intend to start business). Furthermore, Vesalainen et al. (2000) define latent entrepreneurship as a conscious state of mind that directs attention (and therefore experience and action) toward a specific object (goal) or pathway to achieve it (means). Latent entrepreneurs wish to be self-employed in the future and have the possibility to realize self-employment with adequate policy. Pihie (2009) claimed that intention is the state of mind or attitude which influences entrepreneurial behavior. A strong association exists between the entrepreneurial intention and the actual behavior. Henley (2007) points out that entrepreneurship is an intentional activity, in that for many those intentions are formed at least a year in advance of new venture creation. This suggests that there is a link between entrepreneurship and intention. Entrepreneurship education has been considered as one important factor to foster and develop the intentions and behavior among its youth entrepreneurship (Kourilsky et al. 1997).

Entrepreneurship and accounting have been emphasized in recent years by the corporate leaders, business press, and academicians. Entrepreneurship education provides students motivation, knowledge, and skills essential for launching a successful venture company (Cho 1998). Taking into account all this widespread development, one should think that the theoretical bases of entrepreneurship education are solidly established. Entrepreneurship education seeks to propose people, especially young people to be responsible, as well as enterprising individuals who became entrepreneurs or entrepreneurial thinkers who contribute to economic development and sustainable communities. The Consortium for Entrepreneurship Education (2008) states that entrepreneurship education is not just about teaching someone to run a business, it is also about encouraging creative thinking and promoting a strong sense of self-worth and empowerment. Through entrepreneurship education, students learn how to create business, but they also learn a lot more. The core knowledge created via entrepreneurship education includes:

1. The ability to recognize opportunities in one’s life.
2. The ability to pursue opportunities, by generating new ideas and found the needed resources.
3. The ability to create and operate a new firm.
4. The ability to think in a creative and critical manner.

Given the proliferation of entrepreneurship education, it is necessary to organize the framework. Jamieson (1984) suggested a three-category framework, they are: education about enterprise, education for enterprise, and education in enterprise, recognizing the roles that the different types of education represent. The first category deals mainly with awareness creation and has the specific objective of educating students on the various aspects of setting up and running a business from a theoretical perspective. Education for enterprise, the second category, deals more with the preparation of aspiring entrepreneurs for a career in self-employment with the specific objective of encouraging participants to set-up and run their own business. Individuals are taught the practical skills required for business management. The courses are often directed towards the preparation of a business plan. The third category, education in the enterprise, includes management training for established entrepreneurs and focuses on ensuring the growth and future development of the business.

Henry et al. (2005), deliberates entrepreneurship education which states that entrepreneurship has two sides, namely the ‘science’ and ‘art’. Science includes managerial functions and skills. Moreover, side of art is creative and innovative entrepreneurship that can be trained through practice. Furthermore, it can be added that entrepreneurship education goals include: a) Gaining knowledge is closely related to entrepreneurship. b) Gaining expertise is the use of techniques associated with analysis of business situations and in synthesis of the work plan. c) Identify and stimulate the spirit, talent and expertise relating to the business world. d) Develop empathy and support all aspects specifically related to entrepreneurship. e) Directing the attitude to accept the changes. f) Pushing to start new business and other commercial cooperation.

However, Garavan and O’Cinneide (1994) were more focused on education and training for small business owners and have
classified the type of training into three categories, which seems to be related to the individual's stage of development: (1) business awareness education that usually appears in secondary school; (2) in field education and training for small business ownership; (3) more specialist education conceived to enable people to update their skills.

Incorporating accounting education in entrepreneurship continues to invite discussions amongst both accounting and entrepreneurship scholars. Based on Obadan (2001), accounting education is the process of teaching and learning in a school system to improve knowledge and develop skills in accounting. A review of extant literature indicated the following accounting skills required for successful entrepreneurs. Through accounting education, the entrepreneur can acquire basic accounting skills without necessarily relying so much on the accountant for basic accounting knowledge.

Theuri and Hertz (2008) claimed that the acquisition of the relevant accounting skills enables the entrepreneur to have full knowledge of measurement of the impact of his or her activities on environmental resources. Where such activities adversely affect environmental resources, a signal of non-sustainability is sent, which may enable the entrepreneurs to become more environmentally friendly for sustainability. According to Obadan (2001) also asserted that when entrepreneurs are knowledgeable in accounting, they have the opportunity to achieve economic prosperity, environmental protection, and social cohesion. In contrast, Herbert (2006) identified the following factors militating against the effectiveness of accounting education is lack of infrastructure and qualified accounting teachers. He also noticed that the contents of most of the accounting curriculum that is taught in secondary level are imported from foreign countries and are not compatible with our local contents.

Enterprise systems provide support for managing business processes. Accountants need to understand these processes so they can understand the risks that are present and highlight the internal control problems. This creates a significant opportunity for the accounting profession to take a central role in the configuration and management of processes within an enterprise system (Arnold and Sutton 2007).

Creating innovative learning teaching process as fundamental value at school takes creativity and innovation. In education, the term creativity is often used but seldom defined. Learning in a creative way is certainly a form of meaning-making. Current pedagogical discourses attempt to view learners as the centre of teaching and learning processes, with an active role in the production of knowledge and meaning, democratically bringing their expertise, experiences and ideas into the classroom (Williamson and Payton, 2009). Moreover, constructivist approaches to learning involve understanding and making new and valuable connections between old and new knowledge. As Piaget (1973) had claimed, “to understand is to invent”. Without invention, learning results in merely memorization and teaching as a consequence can be viewed as nothing more than imparting notions. Understanding is a form of meaning creation – just as creativity is. Therefore, creativity is an aspect of learning (Craft 2005).

Non-creative learning, on the other hand, comprises all learning that favors memorization over understanding; rote-learning and learning of facts. Both creative and non-creative learning are important for education and should co-exist. It is unavoidable to go through a certain amount of non-creative learning before being able to make any new connection or to embark on understanding a topic. At the same time, non-creative learning is not enough, as understanding is fundamental for the cognitive and cultural development of children and young people.

According to Arnold and Sutton (2007) suggest that accounting students should achieve an understanding of core business processes in both retail and manufacturing enterprises. Enterprise systems are capable of modeling cross-functional business processes and tracking their execution. Consequently accountants need to be less concerned with individual transactions (Sutton 2000), and more concerned with understanding business processes and how these function in a technology enabled environment. Importantly, if processes are configured correctly, then each component transaction will be executed correctly, assuming no deliberate interference with the system or its data. For business this means more readily available data and analytical tools to inform timely decision making.

Based on my observation as a teacher, I am dealing with students who are very young,
energetic, and familiar with information and communication technology especially social media. Based on literature review, they are categorized as Generation Z. The Generation Z is smart, remarkable practical, and can be characterized with superficial and divided attention because they use more kind of media simultaneously. They are born into a visual era, and think not in trends but in scenes. Information and values of environmental protection are important for them (Tari 2010).

According to Tabscott (2009) this generation has eight special characteristics, or norms. These are freedom, customization, collaboration, scrutiny, integrity, fun, speed and innovation. They prize freedom and freedom of choice. They want to customize things, make them their own. They are natural collaborators, who enjoy a conversation, not a lecture. They scrutinize and insist on integrity. They want to have fun, even at work and at school. Speed and innovation are normal for them, the parts of life.

To engage and attract students’ interest, I designed comprehensive learning method by integrating entrepreneurship and accounting concepts through online store named B'shop at entrepren.webnode.com. This online store is made by IGCSE 9 Business stream students under my supervision as a teacher and consultant for this integrated project. Using blog as media and getting real life learning experience for students to be entrepreneurs and accountants are the main purpose of the B'shop. I as a teacher provided the template and design of the web and students managed this online store professionally with clear job descriptions based on their interests and expertise.

**METHOD**

This research was designed using triangulation approach. Firstly, qualitative method is implemented with an open-ended questions and secondly by investigating the quantitative method using ANOVA as statistic tool. The empirical data were collected on February up to May 2012 by using questionnaires and were analyzed with descriptive statistics and quantitative testing. For this study, questionnaires were given to all KIS students from secondary 7 up to advanced 12. The total number of students is 51 students. I collected the primary data through a primary survey in the form of self-administered questionnaires. All students completing the questionnaires but there is one student did not complete the questionnaires so the total number of respondents for this study is 50 students. I was careful to tell all students that there were no ‘right’ or ‘wrong’ answers and that they would not be evaluated as individuals in any way. The respondents’ average age was 15 years old and 58.8 percent were females. Students have the following grade: a) Grade 7: 3 students, b) Grade 8: 13 students, c) IGCSE 9 (business stream): 7 students, d) IGCSE 9 (science stream): 12 students, e) O level: 13 students, f) A Level: 2 students

The questionnaires were used and divided in two sections: open-ended questions and 26 items of question to measure entrepreneurial intentions. The items have been measured using 5-point likert-type scales denoting strongly disagree to strongly agree probability. I included five open-ended questions on entrepreneurship learning process and future career goal. The answers to these five questions complement the main question on entrepreneurial intentions. Moreover, the five questions served as a good introduction to a topic and gave me insight into the reasons of students wishing or not wishing to start their own business. The answer rates for this study were above 98%. In-depth interview was conducted to analyze the policy makers’ perspectives on integrated entrepreneurship and accounting curriculum and its process. It was took place in school with principal and vice principal for academic affairs.

The research results formed five dimensions as related to inclusive entrepreneurship and accounting curriculum. These are: ethical, moral, and legal considerations in business; financial literacy; digital literacy; communication in a business environment; and business skills. This combination gives new contributions to multi-scientific applied research. From the education viewpoint, the present study gives new information on the educational needs of accounting practices in “gen-z” learners. This study has provided ready-made models for secondary school to develop curriculum align with the sense of entrepreneurship.

**RESULT AND DISCUSSION**

At KIS, integrated entrepreneurship and accounting curriculum has not formed yet. In this study, I proposed the integrated curriculum on entrepreneurship and accounting for business stream mostly. The design of KIS integrated curriculum equips students with creative and enterprise skills
that will be of significant benefit in both their educational and future working life. The curriculum is designed for students starting in grade 7 to learn about introduction to economics. In grade 8, students learn more on economics and factors influence the very beginning stages of planning new business with basic accounting skills. After passing the grade 8, students will be divided in two streams: business and science stream. This design, more focuses on business stream eventhough could be executed also in science stream.

In IGCSE 9 Business stream, students learn entrepreneurship and accounting through entrepreneurial selling and cyber marketing in the 1st and 2nd term respectively. The whole design of integrated entrepreneurship - accounting curriculum implements cross curricular development emphasized student centered learning and multi-disciplinary approach.

The design of this curriculum uses several methods in delivering its content, reading and lecturers by guest speaker and teacher on several topics such as business model canvas, building community, management course, exploration on site and project. It is aligned to Garavan et al. (1994), which suggest that the best method suites to entrepreneurial learning style are active, applied and active experimentation and these also include concrete experience, reflective observation, and abstract conceptualization. On the other hand, this design creates creativity, multidisciplinary, process oriented approached and theoretical based practical application. It helps students to be more proactive, think about the problem solving, and have flexible approach to their project’s problem rather than have rigid passive reactive concept and theory.

Many of today’s students will go on to enjoy success running their own business operation or working within large, multinational organizations which value entrepreneurial skills as a vital part of innovation and growth. This may start on a small scale as self employment – but even the most modest business has the potential to grow and flourish if the individual in charge knows the concepts and practices that make a successful entrepreneur. In addition to enterprise skills, KIS modified Cambridge syllabus to equip students with a range of vital life skills for use in planning and organization, communication and financial management. The integrated curriculum content shown in details:

1. An introduction to enterprise
   a. What is meant by enterprise?
   b. What different ways are there of being enterprising at school and home?
2. Building a successful enterprise: the skills required
   a. How can I identify entrepreneurial skills?
   b. What does analyzing the behavior of successful entrepreneurs teach us?
3. Business opportunities and risk
   a. How do opportunities for enterprise arise?
   b. How do I take and accept risk for a business?
   c. What are the legal risks?
4. Successful negotiating
   a. What is negotiation?
   b. What skills do I need to negotiate successfully?
   c. How do I plan a negotiation strategy?
   d. What can we learn from the negotiation process?
5. Behind every successful entrepreneur there is a successful business plan
   a. Why should I plan?
   b. Understanding and explaining business objectives
   c. What are short-term, medium-term and long-term business plans?
   d. Understanding start-up laws and regulations
6. Help and support. How do I identify and understand sources of help?
7. Setting up a new enterprise
   a. What different types of businesses are there?
   b. What is the purpose of a business?
8. Understanding finance
   a. When should I spend and when should I save?
   b. How can I finance my enterprise?
   c. What is credit and debt?
   d. Understanding budgeting, cash flow, and profit and loss
9. Knowing your market and your customers
   a. How do I reach my market?
   b. What are my customer needs and how do I understand these?
   c. How do I keep my customers?
   d. How do I communicate with my market?
10. Communication is key
   a. What are the different types of communication?
   b. Using appropriate language
   c. What are the differences between internal and external communication?
   d. How do I plan and run effective meetings?

   It is imperative to have in mind that integrated curriculum, from an early age in one’s life, does not only concern business, start-ups, and new ventures. Integrated entrepreneurship and accounting curriculum prepared by KIS mostly to do with the ability that students have to turn their inspirations into actions. With more education and encouragement, students should be able to realize their entrepreneurial aspirations. This outcome will increase economic growth in communities and open new job and career opportunities, regardless of economic circumstances. Although not all students will become entrepreneurs, all students and society benefit when individuals have a solid education, that gives them entrepreneurial knowledge and skills to use over their lifetime. The figure below shows the integrated entrepreneurship and accounting curriculum at KIS.

   Based on the questionnaires, section 1 was open-ended questions conducted to respondents; some key questions were delivered to the respondents: a) Do you want to be an entrepreneur? Yes or No, and Why. b) In what sector of business that you are really interested in? c) Do you think that school provides facilities in helping you to be an entrepreneur? Yes or No, and Why. d) Do you think that entrepreneurship subject must be taught inclusive in every subject (such as accounting, science, etc.)? Yes or No, and Why. e) What do you expect from integrated entrepreneurship - accounting learning teaching process at school?

   Analysis of the qualitative data revealed that the attitudes of the students toward entrepreneurship were varying. Students who held this unique view of entrepreneurship shared the belief that with hard work and determination, everything was possible. The following comments from students illustrate their views:

   “...The Karangturi Integrated Entrepreneurship and Accounting curriculum encourages critical thinking and lays emphasis on theoretical and practical skills, making it a challenging, yet exciting academic curriculum...” (Student, grade 7).

   “...With Karangturi Integrated Entrepreneurship curriculum, the teachers make you really understand the concepts. You have to apply what you learn to real life...” (Student, IGCSE 9-Business stream).

   ![Figure 1. Entrepreneurship and Accounting Curriculum at KIS](image-url)
The following remarks from students typify different perspectives on entrepreneurship and accounting:

“...I want to be an entrepreneur, because I will get a lot of money and don’t need to be always in the area of work, can stay at home and get the results of the company by mastering basic accounting skills easily...” (Student, grade 8).

“...I expect that school can give the basic in entrepreneurial mentality, not about the technical aspects...” (Student, O level).

“...What is great about Integrated Entrepreneurship and Accounting curriculum in school is having many activities in real life learning like: financial portfolio, field trip, internship program, company visit, and many more...” (Student, IGCSE 9-Science stream).

As the result, the following entrepreneurial factors related to accounting are collected after encode the open-ended questions: creativity, fun, real-life learning, achievement, motivation, experience, enjoyable, leadership, focus, risk takers, innovative.

All of the questionnaires collected were properly answered, and thus all were used for data analysis. First, I tested the normality of the data by using Shapiro-Wilk. Then, I tested the homogeneity of variances before doing ANOVA test. Based on the results, data was ready to be performed to identify whether any significant differences exist among the six groups: secondary 7, secondary 8, IGCSE 9 Business stream, IGCSE 9 Science stream, O level, and A level Science stream. It can be explained that there are differences among six groups on entrepreneurial intentions by the F-value of 3.592 compared to critical F statistic. Furthermore it can be explained that the highest score on entrepreneurial intentions was IGCSE 9 Science stream followed by Business stream, respectively.

To integrate and make innovative learning teaching process in a business class, I assigned IGCSE 9 business stream students to create business blog when they learned cyber marketing and e-commerce concept. The business blog transformed into online store named B'shop stands for Business stream shop with full address: http://entrepren.webnode.com. This online store is complemented by Facebook on B'shops Karangturi and Twitter: @TheBshop. By using this approach, students are very excited and motivated to learn about integrated concepts between business studies and accounting under solid theories such as theory of Reasoned Action (Fishbein and Ajzen 1980) and Acceptance Model as the most popular theories used to explain online shopping behavior. Therefore, the theoretical framework of this study is based on these theories.

After engaging depth-interview with students about online store project which integrates the concept of entrepreneurship and accounting, several advantages and disadvantages for using this project have been found. One significant advantage is that the online store advances in the intellectual and social partnership created by technology. Students using the equipment engaged additional social skills when they spontaneously took leadership roles in relation to other students. The technology used increased group cohesion and mutual support especially in the small classroom. Its suitability for small-group work and its interactive mode both contributed to the development of skills using information and communication technologies. The classroom also developed a range of communication and social skills that allowed the students to overcome their relative isolation by communicating with students in similar situations. A second educational advantage lies in the online store project provides an alternative, more inviting atmosphere to many. Students learn the accounting process in real life learning to get experience in dealing with accounting flow of transactions was made by the ‘customers’ in interactive way. Creating the sense of real entrepreneurs is also considered to be an advantage. They now realized that being entrepreneurs need comprehensive knowledge in particular accounting to make sustainable business. The online store project also increased students’ motivation in learning accounting which always assumed by them as ‘hard and boring’ subject.

The online store project has its advantages however unfortunately it also has some disadvantages. One of the most persistent problems has been the factor of time. I considered the students’ material must be aligned with the Cambridge curriculum and lesson plan to prepare them for examination. Running this online store takes time and
energy in managing orders, invoices, updating the blog with products and information, and many more. This process does not occur overnight, it requires time, dedication, and some patience. Another drawback related issue deals with lack of products. Most of products sold on online store come from internal school such as teachers, students, families, and friends. Lacking of supply of products affect customers demand to buy the products. Even tough, the ultimate goal of this learning method is to familiarize them with real concept of entrepreneurship and accounting, few customers make them less motivated to explore the project. Although online store project offers students flexibility, this project requires good time management skills.

CONCLUSION
Karangturi International School (KIS) is trying to build comprehensive entrepreneurship curriculum which is modified from Cambridge curriculum as our reference. The integrated entrepreneurship and accounting curriculum offer a range of courses, all built on the belief that effective learning in all subjects of the discipline depends on the development of knowledge and skills in five critical areas: business skills; communication in a business environment; digital literacy; financial literacy; and ethical, moral, and legal considerations in business. The curriculum comprises a set of interrelated courses that extend and deepen students’ understanding and skills in these critical areas as they progress through the grades, enabling them to apply the relevant concepts and skills with increasing sophistication to a broad range of business-related issues and problems. Recognizing linkages between these five areas of study strengthens students’ understanding of theory and successful practice in the world of business. Although the specific content of courses changes from subject to subject and grade to grade, the focus on the five critical areas remains consistent throughout the learning process and lends continuity to student learning.

Using qualitative and quantitative data analyses, I found that high scores on entrepreneurial intentions are positively associated with KIS vision as school of global entrepreneurial spirit. Further, I found that students from IGCSE 9 Science stream had highest intentions to start their own businesses in the future followed by IGCSE 9 Business stream, respectively.

In order to promote sense of entrepreneurship at school, research findings revealed that the entrepreneur needed to be well acquainted with accounting knowledge and skills. The interactive learning process using online store project named B’shop for IGCSE Business students demonstrated the integration between entrepreneurship and accounting. Some advantages outweigh disadvantages to achieve real life learning experience for students. Limitation of this study includes transferability, or the generalization of the study for National curriculum.

REFERENCES


