Journal of Global Business and Social Entrepreneurship (GBSE)
Vol. 1: no. 2 (2015) page 8–16 | gbse.com.my | eISSN 24621714|

INTEGRATING INNOVATION AND TECHNOLOGY IN ENHANCING TEACHING AND LEARNING ENTREPRENEURSHIP EDUCATION IN PUBLIC UNIVERSITI OF HIGHER LEARNING

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Abstract

This concept paper review enhancing innovation and innovation in the entrepreneurship education exposing the need for engaging teaching methods in this field. Entrepreneurship education has been measured one of the key instruments to enhance the entrepreneurial attitudes of both potential and nascent entrepreneurs. Several researchers have discovered that exposure to technology in entrepreneurship education extensively increases the participants entrepreneurial intentions. Technology Entrepreneurship education is not only about the transfer of knowledge, but also about facilitation of knowledge creation processes; and it is not only about cognitive knowledge about a scientific field, but also about the ability to discover new opportunities and master venture creation process by integrating technology producing new product and accelerating the product to the customer.

Keywords: *technology usage ,innovation, entrepreneurship education, teaching and learning., transfer of knowledge, cognitive knowledge*

1.0 Introduction

Empowerment of innovation in entrepreneurship education is one strategy for addressing the problem of unemployment among graduates (National Higher Education Research Institute, 2003; KPT 2013). Entrepreneurship education is the process of providing individuals with the ability and capacity to seek and evaluate commercial opportunities, increase self-esteem, knowledge and skills to start a business (Linan, 2008; Mwasalwiba, 2010; Othman & Poo, 2012). However, (Pittaway & Cope, 2007) entrepreneurship education is one of the important

mechanisms for preparing students for the modern economy, in which business skills become important in employability.

According (Dohse & Walter, 2012) stated that taught entrepreneurial knowledge can be divided into parts of the concept of entrepreneurship and entrepreneurial skills section. He also stressed that entrepreneurship education can encourage students to analyze alternatives in solving a problem. Meanwhile,(Li, 2011) in his writings of the view that entrepreneurship education is a key instrument for improving the entrepreneurial attitude of promising individuals to be involved in entrepreneurship. This view is in line with the opinion (Kemat & Yusof, 2011) stated that the entrepreneurial attitude among students can be nurtured through entrepreneurship education.

2.0 The Development Of Technology Integration In Entrepreneurship Education In Malaysia

In Malaysia, students began to be exposed to entrepreneurship education starting from secondary level. This meant that the country has an educated human capital, skills and motivation (Ahmed, Ahmad, & Usman, 2010; Hassan, Hassan, & Buang, 2010). Among the subjects of entrepreneurship is oriented such as life skills, trade, principle of accounting, basic economics, accounting and economics (Othman, 2012). Integrated Living Skills (ILS) is the basic subjects that give early exposure to entrepreneurship education to students. This subject was first introduced in 1991 in all middle schools in Malaysia involving nearly 1,300 schools. These subjects are also offered at the primary school students in four, five and six in the 1993/1994 school sessions involving 7,000 schools (Othman, 2002). As for secondary vocational schools, implemented through entrepreneurship education curriculum course of trade. This subject is used as one of the elective subjects from group II of Group Technology and Vocational Education (Othman, 2002).

Whereas the development technology integration entrepreneurship education at university level started in 1987 at the Polytechnic to offer subjects Small Business Practice for all students of engineering courses. In 1993, new subjects were introduced, which will replace the Basic Entrepreneurship subjects Small Business Practice. In Basic Course of Entrepreneurship students are exposed to a variety of skills and understanding of entrepreneurship (Mohamed, Rezai, Shamsudin, & Mahmud, 2012).

In 2007, the adoption of a technology integration in holistic education of entrepreneurship in all higher education institutions in Malaysia, the Polytechnic, Public Universities, Private Higher Education Institutions (HEIs) and through the Community College Entrepreneurship Foundation. Through the course the students will be exposed to the study of entrepreneurship and business skills. This course is conducted in an interactive, students are given the opportunity to operate a business project within or outside the campus depend on the ability of these institutions. Practical experience through direct involvement in business projects individually or collectively. Exposure is expected to spark interest and provide training to students with the reality of the real world of entrepreneurship (MOE, 2011). This exposure is said to open students' minds to explore every opportunity not to be too dependent on the government and the private sector in seeking employment (Cheng, Chan, & Mahmood, 2009).

2.0 Integration of Technology in Teaching and Learning Entrepreneurship Education

Determining the teaching technique depends first on the objectives of the course (Arasti, Kiani Falavarjani, and Imanipour, 2012). Jones, (2010) suggest three purposes for entrepreneurship education: education about giving students an understanding of the nature of entrepreneurship and the entrepreneurial process, education for (preparing students to start their own business) and education in enterprise (as hands-on training for entrepreneurs in their own business).

This is supported by (B. Jones & Iredale, 2010) suggest that entrepreneurship education requires experiential learning styles, creative problem solving and learning by doing in order to engage students. Learning by doing could provide a basis for selecting suitable teaching methods. For example (Linan, 2008) have argued that "entrepreneurial skills are learned in a variety of ways and methods. Jamieson (1984) has divided entrepreneurial education into three classes, i.e. education about for and in enterprise. Herrmann et al. (2008) have quarrel that in entrepreneurial education there be supposed to be "a shift from transmission models of teaching (learning 'about') to experiential learning (learning 'for')" in order to "offer students techniques that can be applied in the real world".

(Politis & Gabrielsson, 2009) has affirmed that entrepreneurial teaching, i.e. "attempts to stimulate entrepreneurial activities through formal training and education" are "not likely to have a strong and direct impact on the development of entrepreneurial knowledge. In order to achieve this deep learning, some educators suggest that entrepreneurship education should be connected to practice and be seen by students to be practical so that they are encouraged to develop skills essential for success as an entrepreneur (Arvanites et al, 2006).

Nevertheless innovation in entrepreneurship education teaching needs to be learner-centred, and help students to understand elements of entrepreneurial activity (Gibb, 2002; C. Jones, 2010; Liñán, 2008). Teaching methods that might best engage a particular group of students in order to convey the desired body of entrepreneurship knowledge, and stimulate future learning (Balan & Metcalfe, 2012). However in order to enhance entrepreneur knowledge teaching method be important to educator rising entrepreneurial attitude engage nascent entrepreneur.

According the argument several researcher classify the innovation in teaching methods into following categories: case Study, group discussion, individual presentation, individual written report, group project, formal lectures, guest speakers, action learning, seminar, web-based learning, video recorded (Maritz & Brown, 2013).

The study by Solomon (2002) highlighted that the most popular teaching innovation methods in entrepreneurship education are creation of business plans, case studies and lectures. However, (Hytti & O'Gorman, 2004) advocate different outlook as they argued that there are many ways to offer entrepreneurship education, depending on the objectives of such education. It seems that commonly author categorize teaching methods into two groups, which are termed "traditional methods" (comprising normal lectures) and "innovative methods" (which are more action-based), also known as "passive methods" and "active methods", respectively (Mwasalwiba, 2010). The selection teaching and learning methods should be appropriate to the style of the students and the learning objectives (Reece and

Walker, 1997). Selection of appropriate teaching methods need to be made because the aspects that have a positive relationship to student achievement (Ismail et al., 2009).

This opinion was in line with studies carried out by (Kolb, 1976) and (Fry, 1978) indicating that the method of teaching and learning is an important indicator of student achievement. Thus the choice of teaching methods be corresponding to topics to be studied by students be able to enhance understanding and performance of student (Mohamed et al., 2012)

Nevertheless, methods a traditional approach to teaching and learning that are often used by lecturers in delivering information to students (Akmaliah, Pihie, Nazri, & Tarmizi, 2003). However, criticism of (Sexton & Bowman-Upton, 1988). Argues that the traditional teaching style of the is not appropriate for teaching and learning entrepreneurship. Learning and teaching entrepreneurship should be active and passive open it requires action to implement innovative ideas in line with the entrepreneurial function (Shariff, Hazri, Mohamad, & Jusoff, 2010).

3.0 Integrated Innovation and Technology in Teaching and Learning Entrepreneurship Education

Entrepreneurship, as a skill and doings is often associated with innovation, technological progress, economic growth and the generation of employment. This view is particularly held by policy makers and thus there has been a general support and encouragement from the governments towards offering entrepreneurship courses within different academic programmes (Martin, McNally, & Kay, 2012). Nowadays teaching and learning using technology is relevant to encourage entrepreneurial intention among student. Innovation in pedagogy teaching and learning encompass need of student in support of attraction to entrepreneurship learning process (Roblyer, 2006)

Because of that, Innovating in Entrepreneurship Education are important. Innovating in teaching entrepreneurship requires different approaches, different from traditional teaching in view of the fact that the European Commission (2008) intense out there is a need for more interactive learning approaches where the teacher acts rather as a moderator than a traditional lecturer, where multi-disciplinary approaches to entrepreneurship teaching are adopted and where, among others, specific business skills and knowledge of how to start a company and run it are successfully transmitted. Traditional educational approaches have resulted in a mismatch between what is taught to the students and what the industry needs. As such, many institutions are moving towards problem-based learning (PBL) as a solution to producing graduates who are creative; think critically and analytically, to solve problems (Yeo, 2005).

PBL solving stems from the use of problem is usually a matter of life or a real business that needs to be discussed or resolved by the student (Graaff & Kolmos, 2003). Use of the issues will be the context for students to gain and apply knowledge. The learning process begins when students turn their existing knowledge in solving problems. Students will use a systematic procedure to solve the problem of analyzing the problem, establish learning objectives, collect information and acquire new knowledge relevant (Hung, 2009). In this method, a teaching assignment was as counselor to stimulate learning and encourage discussion and collaboration among students.

According to Dunn et al., (2013) features the implementation of PBL is learning in small groups, the real problem as taxi to travel the PBL, the lecturer as a mentor and the process begins with the problem until a solution to the problem. Quality of learning in this method depends on the quality problem given to the students. PBL assignment must conform to existing knowledge level of students and PBL task must be geared to problem-solving activities and stimulate positive learning climate (Skelin, Schlueter, Rolle, & Gaedicke, 2008).

An example of this practice methods that have been practiced in entrepreneurial education is an entrepreneurial program called 'business building' (developing enterprise) conducted at Republic Polytechnic, Singapore. The program is carried out using a set of problems that is designed like -will be equal to the real problems in the business (Tan & Ng, 2006). The purpose of this program is to help students develop the idea of starting a new venture and experience the real world of business in a safe and not at risk of being on campus. The findings of a study conducted (Tan & Ng, 2006) on the program is a program that allows students to work on an understanding of entrepreneurship. Students should be able to evaluate the opportunity to be critical and understand the factors that influence the success of an entrepreneur.

Besides, simulation methods also an innovation in teaching and learning methods of entrepreneurship education. According to (La Guardia, Gentile, Dal Grande, Ottaviano, & Allegra, 2014) was based teaching methods or simulation games can stimulate and nurture entrepreneurship among students. Through simulation, students can learn the step-by-step approach to analyzing the company's management, decision-making processes and to enhance the competitiveness and encourage students to become entrepreneurs through this experiential learning.

According to a study conducted by (La Guardia et al., 2014) simulation method helps the active cooperation between the students. On the assumption that game and simulation environment make the learning experience more effective. Through the proposed training model combines learning methods or mixed (blended learning). Classroom activities focused on serious games, focused on the development of soft skills that are essential for the formation of an entrepreneurial mindset, and learning activities online, which enables students to explore business concepts presented in the lecture room.

Learning through computer simulations can teach complex skills. Computers not only can display text, but also the video, audio installation also use virtual reality can represent a sense of movement in three dimensions. Learning through active learning feature computers and individual learning where students are able to control the interaction with the program. According to (Leach, 2008) in his study include multimedia tutorials online learning as an element which has a duty to seek business opportunities. Tutorial is likened to find business opportunities as fishing. Among the questions asked to the student assignment is to list and describe activities that students enjoy doing, activities that students do well and imagine things will be made by the students to turn their lives around the world if they do not have exams and assignments. The multimedia tutorial, individual and used with other methods such as lectures and workshops methods.

Similarly, the methodology or approach Massive Open Online Course (MOOCs) that began was first introduced in Malaysia in 2014 at the University of Taylor (Al-Atabi & DeBoer, 2014). University of Taylor was a pioneer of entrepreneurial learning approach online. The study found that more students show high interest in entrepreneurial careers.

5.0 Conclusion

According Leffer (2006) process that could stimulate entrepreneurial capabilities such as innovation, creativity, proactive and willingness to take risks can be imbued with special learning and teaching in entrepreneurship education. This view is consistent with the opinion of (Alain Fayolle & Gailly, 2008; Liñán, 2004). However the appropriateness of the choice of methods of teaching and learning is important in entrepreneurship education. Appropriate selection of entrepreneurship teaching and learning methods affect the formation of an entrepreneurial attitude**.**

Nevertheless passive learning methods are essential in the learning process of entrepreneurship, for example by a study conducted by (Jurie van Vuuren Melodi Botha, 2010), which tested the effectiveness of mentoring and formal lecture on the fundamentals of entrepreneurship and entrepreneurial base of advanced thin. The study found that students who complete the course has a tendency entrepreneurial career in entrepreneurship. However, the study conducted by (Souitaris, Zerbinati, & Al-Laham, 2007) in which the passive teaching methods in class lectures, business plan preparation and interaction with experts there is not significant in influencing the intention of entrepreneurship among students in the United Kingdom. The findings of this research also shows that self-employment skills among university students is low. Although like any according (Buang, 2006) at the beginning of the learning process of this lecture method was necessary because to explain the topic, concept and content of courses to students in increased insight and student performance. Thus, both of these approaches has its own advantages that depends on their perception in evaluating the effectiveness and suitability of teaching and learning methods used by lecturers or tutors.

Practical elements should also be applied in the integrating of technology in teaching and learning process of entrepreneurship education. For example, in the view (Parvaneh Gelard, 2011) integral component of entrepreneurial training is a process of social learning. In this case, invite successful entrepreneurs (role models) to allow students to experience college or small business through interaction with local entrepreneurs can be seen as an act of support. Develop entrepreneurial skills as vital life capacity should be the main target of all faculties of the university.

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