A REVIEW ON THE RELATIONSHIP BETWEEN BUSINESS PLAN LEARNING OUTCOMES AND BUSINESS PLAN SIMULATION IN ENTREPRENEURIAL EDUCATION

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ABSTRACT

Entrepreneurship education prepares graduates to be more confident to enter the business world. The objective of this paper is to review the relationship of business plan outcome with the business simulation outcome. Due to that an initiative had been made to explore the relationship of business simulation to achieve business plan learning outcomes. The literature of learning outcomes from business plan and business simulation was used to explore the relationship. The finding showed that business plan learning outcomes could be achieved through business simulation. This will benefit on the program outcome, the student and the educator.

***KEYWORDS**: Business plan; business simulation; learning outcome; experiential learning*

1.0 INTRODUCTION

Business plan courses are a part of entrepreneurial education which cater to the needs of entrepreneurs in comprehending business processes and future planning. Indeed, a business plan can guide entrepreneurs to make possible actions and wise decisions. The 4th issue stated in the Malaysian Entrepreneurship Policy shows that the effectiveness of entrepreneurship and education and program is still the issue (Tinggi, 2010). Malaysian higher education institutions are still using conventional teaching methods which

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are mainly educator-oriented. The idea to expose business plan through business simulation is to embed experiential learning (learning by doing) in students. The third element of the Entrepreneurship Development Policy is to strengthen Entrepreneurship education that aims to expose students to the real business world and at the same time assist them to choose a start-up business as a career. Business simulation is designed to simulate real business process and integrate decision activities to every function in the business. Students are assumed to be able to prepare effective business plans when they have undergone the business process in a simulated environment. The objective of this paper was to review the relationship of business plan outcomes through playing business simulation.

Honig and Karlsson (2004) defined a business plan as a written document that provides the current and future state of an organization, often intended for pre-start-up planning. Graduates will have an added advantage of understanding the flow of the business process and the relationship of each business function. when preparing business plans.

2.0 LITERATURE REVIEW

Entrepreneurs write business plans to guide them in the running of the business and proposing of business funds. The entrepreneurial education in Malaysia is initially exposed in secondary schools within the Integrated Living Skills course for Lower Secondary Evaluation (PMR) (now known as PT3) and the full course is for Malaysian Certificate Education (SPM) paper that is Entrepreneurship Study. The Higher Education Ministry introduced the Entrepreneurial Action Plan 2016-2020 on 15 April 2016 that urged lecturers, students, industries and target groups to create a conducive entrepreneurial ecosystem to Malaysia as an Entrepreneurial Nation. The first initiative of the Entrepreneurial Action Plan is to get a 100% exposure of entrepreneurial culture and attributes among the students of higher learning institutes. Hence, Entrepreneuership course was initially introduced as General Course Studies (MPU) that was enforced on September 1, 2013 for a new new cohort of students intake in all HEIs. After that, MPU enforced ed The Second Edition of MPU Guideline in September 2017. Interestingly, the Guideline includes business simulation as one of the

assessments for entrepreneurship course .

2.1 Business Plan Education

Business plan is central for entrepreneurship education and is the key for successful venture creations (Gruber, 2007). Most of the tasks given by lecturers for entrepreneurship education require students to prepare business plans for their business projects. Lecturers assign students with business plan models because project oriented output helps with student asessments, as well as provides structure and focus in a selected field (Honig, 2004). Preparing business plan requires understanding the business process itself because as stated by Honig (2004), the business environment is crucial for an effective implementation of any business plan. Cook et al. (2004) agreed that a properly written business plan should be simple and a pitching session will enable students to score higher marks. Students are working independently for preparing business plan along with several hours of lectures, handout and required reading to know the mechanic of running a business. However, in doing so, the exposure to the mechanic of business process is not adequate because real business world phenomena are lacking. Thus, Mcging (2008) suggested that experiential pedagogy can be considered for the Business Plan module involving participant centred learning, technology and guest speakers.

2.2 Business Plan as an Experiential Learning

The business plan itself is an experiential learning, as Malik et al. (1997) stated that a business plan is an experiential technique created to give students ample opportunities to build their integration, analytical and decision making skills. Vincett and Farlow (2008) found that general experiential entrepreneurship education uses the term new venture creation for project-based courses, purposely to simulate the entrepreneurial process. Teaching methods should be focusing on implementing hands-on activities where outcomes in experiential learning can be created (Honig, 2004). Figure 1 shows two examples of experiential learning in Entrepreneurship Education; perform simulation and create Business Plan.

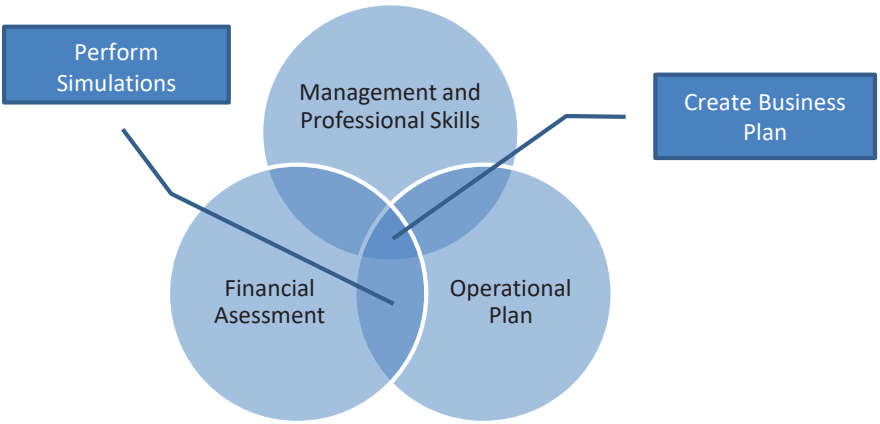

Figure 1. Business Plan and Simulation as experiential learning in Entrepreneurship Education adapt from Wheadon and Couetil, (2014)

2.3 Business Plan Simulation

As recommended by Malik et al. (1997), business plan simulation must be applied because projects consist of large component of process application using business plan as integrative tool. Business plan is integrated with simulation as both methods fall under an experiential learning which is capable to give exposure to real business world. According to Wheadon and Couetil (2014), business plan acts as a process simulation to create business that includes (a) product or service validity (b) analysis of financial need, potential return and source of funding (c) validation of distribution and marketing plan; and (d) substantiation of team with necessary talent to implement the plan. Writing exercise of a business plan is a common pedagogy for entrepreneurship course (Fregetto, 2005). However, when the size of the class increases the value of the exercise will diminish. The size of students and lack of time to examine the business plan lead us to implement business plan simulation that can overcome the problem. As an experiential learning, business plan simulation designed with problem-based course enables students to enter new realms of starting a real business (Pittaway, 2004). Fregetto (2005) listed the advantages of business simulation as follows:

(a) all decisions are interconnected in real business decision.
(b) students undergo the maturity and growth of an industry.
(c) students acquaint with the market research value.
(d) students are emotionally engaged at the beginning of the simulation and then more passionate about their business.

2.3 Business Plan Learning Outcome

Learning outcomes are used to measure the level of perception by students in every course they take. According to Duval-Couetil et al. (2016) the pedagogy as one of the factors influencing entrepreneurship program at the university is included in outcomes of that course. Wheadon and Couetil (2014) applied a number of Specific Learning Outcomes (SLO) in every Global Instructional Objective (GIOs) for their business plan activities such as marketing, operational and financial plan. Learning outcomes are measured by specific assessment where every assessment comes with different pedagogical approaches. Entrepreneurial learning outcomes are used in focus groups to encourage educators to think carefully about assessments as possible innovative learning design (Pittaway et al., 2009). Hays (2005) found that the roles of educators in encouraging the learning outcomes appear to be more important rather than the educator involvement (educational support). Clarke (2009) listed some learning outcomes for business simulation; (a) motivation, (b) analytical thinking and problem solving skills, (c) knowledge transfer, (d) cross functional and decision making skills, (e) Increasing of knowledge retention, (f) adaptable learning, behavioural, (g) attitudinal and knowledge change. Hynes (1996) asserted that learning outcomes for the entrepreneurship module for every topic are divided into three learning aspects namely concepts, skills and attribute. Business simulation provides a space in which learning is an outcome of tasks executed and stimulated by elements of simulation, whereas the knowledge is created through elements of simulation and skills are developed after playing the simulation games (Barišić & Monika, 2014)

2.4 Business Simulation as Experiential Learning to Real Business

Business Simulation courses are important to cater to the needs of stakeholders and they show an innovative way of education. Simulation games are all quite the same in terms of getting input from students, processing information and confronting participants with certain consequences of their decisions, both in right terms of liquidity status, profit, loss, or market share, and other virtual rivals (Keshodarah, 2013). Simulation can bring impact to the path of education, it brings the player or the participant to use their current knowledge to face the simulated business world. They tend to enhance their knowledge and skills and at the same time learn new things to survive. In terms of managing

business, simulation enables players to understand the management functions in a business environment. Loading with experience, most entrepreneurs' first knowledge is from these experiences, hence, learning through experience will allow students to improve their skills, especially in the business world. Business simulation is an effective experiential method that promotes business concepts, to appreciate a cross-functional understanding of business and to increase decision-making (Kulkarni, 2013).

To participate in business simulation is an experiential learning that students can stimulate and feel. Teaching strategies would facilitate this decision; however, current development efforts should use simulations and games to get more students' attention from the teacher (Mulcahy, 2011). Therefore, the team can create a social and serious game that teaches the concept of identity in an environment of business who has multiple aspects of online communities (Critelli et al., 2012). Tao et al. (2012) learned that many teachers no longer use business simulation games (BSG), or assistant teachers just ask them to do a task or a BSG as a means of competition without personal involvement because of the high complexity management game time and investment necessary to facilitate the process. In addition, by grounding gaming activities supported by project-based learning pedagogy, the characteristics of digital games can be in line with the intended objectives of education and,thus, facilitate the achievement of student learning (Panoutsopoulos et al., 2011). Kulkarni (2013) stated that most business simulations enable students to manage a firm in a competitive environment; (a) compete with other firms in the same industry, (b) produce, manage resources and market goods to achieve profit, (c) Teams compete and are required to run a firm by deciding across functional areas (marketing, R&D, HR, manufacturing, finance). Simulation creates roles in business area to be played by students. Business simulation content gives a range of learning as an outcome and also develops knowledge and at the same time develops skills (Barišić and Monika, 2014). Juan Sebastián and Carlos Mario (2015) viewed that simulation game is an active learning approach for teaching strategies. According to Tawil et al. (2015) simulation game provides an understanding for decision making in a real business life.

3.0 METHODOLOGY

This study analyzed the relationship of business plan outcomes with the content of business simulation. Literature of the learning outcomes from business plan education and business simulation was used to explore the connection of both experiential learning. Thus far, many researchers attempt to explore the best and effective pedagogical entrepreneurship education to foster the entrepreneurial knowledge, skills and behaviour among students. They also try to test various teaching methods that can also prepare the students to start-up a business after graduation. While setting the appropriate learning outcomes the educators should provide more effort to deliver subject matters through effective methods. For this study, the connection between achieving business plan learning outcomes through implementing business simulation was analyzed by means of reviewing the results of relevant previous studies.

3.1 Business Plan Learning Outocme vs Business Simulation Learning Outcome

Wheadon and Couetil (2014) searched for the SLOs (specific Learning Outcomes) and assign six categories of cognitive process dimension; remembering, understanding, applying, analyzing, evaluate, and create. Sorensen (2011) highlighted the revised Bloom Taxonomy's theory to assimilate the Logic Model Theory as learning outcomes measurement for business simulation that cover two outcomes from cognitive and affective. Table 1 shows the comparison between business plan learning outcomes and business simulation from previous studies where the majority of the outcomes use cognitive outcomes.

Table 1. Business Plan Learning Outcome vs Business Simulation Learning Outcome

Business Plan Learning Outcome	Business Simulation Learning Outcome
(Wheadon and Couetil, 2014) Student should be able to:-	(Lawton and Thomas, 1997) Student should be able to:-
• remember the components of the written business plan • organize and differentiate data on unsolved problem, environmental trends, and gaps in the marketplace. • identify the strengths and weaknesses of these sources. • understand the difference between an opportunity and an idea for a business venture	• apply business specific skills and knowledge • apply general problem solving, analytical,critical thinking, and decision-making skills • know the career and general business knowledge • know the interrelationships among business organisation and business functional areas • apply business specific skills and knowledge

(*continued*)

(*continued*)

• analyze many types of information (demand, target market, industry organizational and financial feasibility))	• apply the general and interpersonal Skills
• apply procedural knowledge (to perform, feedback data, consumer behaviour and concept testing)	(Anderson and Lawton, 2009)Student should be able to:-
• understand the concepts of industry analysis and their impacts on new ventures.	• apply the principle and concepts of of business to make effective decisions)
• analyze market segmentation, trends, size, buyer behavior, and competitors.	• understand the interrelationships among the business functions (production, marketing, finance, etc.).
• analyze information on product positioning within the market with other products in the market	• show the difficulty of implement business concepts that appear relatively easy
• understand the different kinds of legal entities of new business, and the use of organizational charts.	• understand the concept, terminology, and principles of business in a specific and general discipline
• analyze other types of the company structure.	(Marriott, 2004) Student should be able to:-
• understand how to protect their product under the intellectual property	• prepare the need for adequate and timely financial information)
• analyze information about cost, risk nd supply chains, as part of the operations plan	• know the capital availability and the need for finance
• understand how the location give impact to business success.	• understand the use of the financial projections in the business plan
• understand the different sources of funding has the drawbacks and benefits of each.	• aware of their business model to take intuitive decisions and quickly respond to unexpected events
• break down the costs of their new ventures and analyze the types and amounts of funding they will need	(Masala, 2006) Student should be able to:-
• apply financial planning tools knowledge such as cash flow , income statements and balance sheets statements.	• apply entrepreneurship concepts to a new business opportunity
• understand the different types of pitch and presentations..	• enhance the readability of a business plan technical writing use as a tool to prepare the plan
• apply information about connecting and knowing audience to the presentations.	• recognize and choose a new business opportunity
• apply knowledge to use time management and presentation software to make effective presentations	• apply entrepreneurship concepts to a new business opportunity
	• organize information and data in a concise and clear manner to prepare business plan documents
	• apply a new business opportunity to a business plan format using creativity and critical-thinking skills

The previous studies consist of stwo method of entrepreneurial experiential learning which can be combined to develop a new method of learning using business plan simulation because both possess almost the same outcomes required to be achieved by students. It started with knowing the business plan format, write it in word processing then able to prepare business plan content

and end it with effective business plan and pitching skills. A preparation of business plan consists of gathering data and information about the market, industry and other competitors. The learning outcomes also test the student on managing sources and of understanding the interrelationship among all business functions. Other important things to be included in preparing the business plan is on how to produce financial statements and financial analysis.

4.0 DISCUSSION

Learning outcomes might also relate more readily to measures of efficiency and efficacy (Scott et al., 2016). Kriz and Auchter (2016) use logic model to elaborate how the interaction of a program, the students, and environment is expected to elicit the program's outcomes. The logic model (refer Figure 2) consist at least three types of variables, that are input (antecedent variables), process (variables of program activities), and outcome (variables of program effects). Focusing on the outcome variable Kriz and Auchter (2016) list five important outcomes that are learning profesional skills, social and personal competence, motivational and long-term effect. They use both cognitive and affective outcomes of Bloom's taxonomy.

To create the relationship between business plan and business simulation outcomes, the Kolb's (1984) experiential learning theories (Figure 3) as the process and Bloom et al. (1956) taxonomy theories as the desired outcomes are combined in the Logic Model of business plan simulation.

The Logic Model of Business Plan Simulation will use Bloom Revise Taxonomy as the outcomes based on Table 2. Previous studies on outcomes from business plan and business simulation both apply Bloom's taxonomy as an outcome and focus on business process with testing on student entrepreneurial skills. The learning outcomes per individual are different with the overall outcomes because his/her experience varies in terms of business simulation including his/her input on business plans, role in virtual company and experience of making a decision in the team (King & Newman, 2009). Gafar et al. (2012) found that business plan and business simulation are a part of effective teaching method in an entrepreneurial learning.

Input	Processes	Outcomes
Socio-demographical data: Gender, age, gender, stage and course of studies; *Startup disposition*: desire to create a startup,; Previous attitude/experience *Skills:* knowledge of administration and business, social competence, business plans preparation *Entrepreneurial competence:* attitude to risk, tendency to innovation, proactive orientation *Personality disposition*: desire to be independent , achievement motivation, willingness to prevail, the propensity to lead , emotional stability, , etc.	*Individual Learning:* Under and over challenged, role-taking, , motivation level, and causal attribution *Interaction in the simulation*: learning time, the number of periods in simulation, type of simulation (version, complexity); type of seminar (obligatory course or voluntary cup event) *Social Learning:* Interaction among student (intensity and quality of leadership, teamwork,), Interaction among student and trainer (intensity and quality of facilitation/ support / debriefing)	*Learning: professional skills:* knowledge of economic and business, business plans and start-up preparation *Social & Personal competence:* team skills, individual strengths & weaknesses recognation *Motivational:* intention to be entrepreneur *Simulation success:* simulation acceptance, satisfaction *Long-term effects:* the degree of real startups founded by participants

Figure 2. Logic model of entrepreneurship education with start-up simulations adapt from Kriz and Auchter, 2016

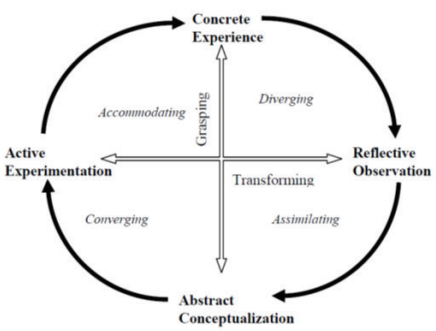

Figure 3. Experiential Learning Theory adapt from Kolb and Kolb, 2008

Table 2. Cognitive Process Dimension fram Bloom Taxonomy and Bloom Revise Taxonomy

	Cognitive Process Dimension					
Original Bloom Taxonomy (Bloom et al., 1956	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Bloom Revise Taxonomy in business game (Ben-zvi and Carton, 2008 and business plan Wheadon and Couetil, 2014	Remember	Understand	Apply	Analyze	Evaluate	Create
Bloom Taxonomy in Hotel Simulation Games Sorensen, 2011	Creating	Evaluating	Analyzing	Applying	Understanding	Remembering

5.0 CONCLUSION

In conclusion, the outcomes of entrepreneurial education in any academic institution are based on the program educational outcomes and reference used to develop the entrepreneurship course syllabus. Business plan learning outcomes depends on entrepreneurship curriculum and financial funder requirements. From previous studies, the business simulation outcomes have the relationship with and similar outcomes for business plan. The present study strives to achieve the business plan learning outcomes from playing business simulation games that allow students to gain more experience and test their knowledge and skills in experiential learning.

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