



An Innovative Teaching Approach to Encourage Creative and Entrepreneurial Mindset among Students: The Case of Smart Financial Statement Card (SFSC)

**Hasni Abdullah¹, Khairi Khalid², Norhidayah Md Yusof³, Badli Esham Ahmad⁴,
Muhammad Zahran Abd Rahman⁵**

^{1,5} Faculty of Business and Management, Universiti Teknologi MARA Pahang, Malaysia

hasniabd@pahang.uitm.edu.my

zahran6006@yahoo.co.uk

² Faculty of Civil Engineering, Universiti Teknologi MARA Pahang, Malaysia

khairikh@pahang.uitm.edu.my

^{3,4} Academy of Language Studies, Universiti Teknologi MARA Pahang, Malaysia

norhidayahmy@pahang.uitm.edu.my

badli@pahang.uitm.edu.my

ABSTRACT

An entrepreneurial mindset is not only focused on contributing to the economy, yet it is also important in creating and developing products, services, technologies and solutions to problems that can be beneficial to the society. Thus, it is important to instill this mindset not only among the entrepreneurs but for everybody and in this context among the students. Therefore, in order to instil this entrepreneurial mindset among the students, the teachers need to be innovative and employ this entrepreneurial mindset in order to entice the students to be actively involved in class while instilling this entrepreneurial mindset in them. In order to achieve this, students' involvement in class should be one of the powerful factors as it will lead to the improvement of the teaching quality especially in higher education institutions. Thus, having better students involvement could lead to success in teaching them.

Therefore, the aim of this article is to introduce an innovative teaching approach by using smart flashcard which is the Smart Financial Statement Card or known as SFSC. It is believed the SFSC can be considered as an innovative teaching approach which employs a process of inculcating entrepreneurial mindset which could help simplifying the process of teaching and learning in finance class. In addition, SFSC is believed to be able to enhance the students' achievement when the teachers use this for teaching and learning purposes. Thus, the preliminary investigation was conducted to study the effects of using smart flashcards on two different groups of students which are control and experimental groups. This is done in order to know how efficient this innovative teaching approach could be.

Based on the results of independent t-test, there is a significant difference in results for students without smart flashcard (control group) and students with smart flashcard (experimental group). It can be seen that students with smart flashcard (experimental group) scored much higher as compared to students without smart flashcard (control group). Besides that, this preliminary result suggests that the teachers are supposedly willing to foster quality teaching by utilizing smart flashcard as an interactive and innovative teaching approach in their teaching process. The result shows how creativity and innovation as well as entrepreneurial teaching approach contribute to the effective of teaching and learning process.

Keywords: Innovative Teaching, Creativity, Entrepreneurial Mindset, Smart Financial Statement Card

1. INTRODUCTION

Education plays an important role in shaping the attitudes, skills and culture of people regardless of the primary, secondary or tertiary level. The combination of innovation and entrepreneurship in education creates a good blend of creativity, interactive learning, skills building and the most important thing is the shift in mindset. In addition, quality and well-equipped teachers contribute to the highest quality of education. However, the current education system is not fully able to produce people who can question, think, be creative and willing to take risks which are the required qualities of the entrepreneurial mindset (Altan, 2014). Hence, the new education strategy needs freedom in learning and teaching by creating active learning that can influence innovative personality development and turns it into entrepreneurial activity (Radovic-Markovic & Markovic, 2012). In order to ensure the freedom to learn, students are encouraged to work collaboratively, ask questions and act actively about the issues and ideas to create a new classroom atmosphere (Forte, 2009). This is important for the students to think creatively as creative individuals are more likely to engage in entrepreneurial behaviour (Simplicio, 2000).

Besides, the teaching and learning environment would be very interesting when both teachers and students play their active roles in this teaching and learning process. There are many studies related to the innovation in education and interactive learning which involves active participation from students as being more preferable than one-way communication (Serdyukov, 2017; Alvarez-Bell, Wirtz & Bian, 2017). In addition, an interactive learning is a learning environment that encourages students to be part of the lesson instead of being passive observers or listeners by quietly sitting taking notes and memorising information delivered by the teachers. This method can be implemented in many ways such as using technology, hands-on group project, class discussions, simulations replacing traditional lecture-based instruction

and many more in which can actively create students' engagement in the classroom. Furthermore, achieving student involvement in class can liven up the classroom ambience (Bonwell & Eison, 1991). This can be associated with the constructivist theory that supports learning through collaboration and reflection (Bruner, 1961). According to Bada (2015), constructivism is a learning theory that elaborates on how a person might get the knowledge and learn. This theory suggests the knowledge created from the experiences and students are the main focus of the learning activity as the teachers are only the persons who assist them in the whole process (Jia, 2010). Therefore, the quality of teaching comes from the interactive learning by the students in class. Hence, the teachers might create a good environment in the learning process especially on the method of teaching to enhance the student engagement in classroom activities.

On the other hand, as Malaysia has moved forward in many sectors, entrepreneurship is one the sectors which evolves tremendously. Thus, more Malaysians especially the students are encouraged to learn about entrepreneurial skills. In fact, entrepreneurial skills can be considered as one of the soft skills that students are encouraged to acquire and employ. This is one of the reasons why there is a need to instil the entrepreneurial mindset among the students. Therefore, it is believed when the teachers and students play their roles actively in teaching and learning process, this could help the teachers in instilling the entrepreneurial mindset successfully among the students. There are several opinions regarding entrepreneurial mindset. First and foremost, entrepreneurial mindset can be referred as a specific state of mind which predisposes and guides a person towards entrepreneurial activities and outcomes as well as transform the opportunities into ideas (Ferrero & Fioro, 2014). Meanwhile, Ireland, Hitt and Sirmon (2003) defined entrepreneurial mindset as a positive perspective of individual which relates to flexibility, creativity, innovation and creating new idea. Thus, it can be said that having entrepreneurial mindset could help the students to upgrade their soft skills to the next level in terms of entrepreneurship.

Thus, this paper addresses the issue which related to the innovative teaching approach in encouraging the creativity and entrepreneurial mindset among students in classroom. Next, the primary motivation of this paper is to examine the effect of using Smart Financial Statement Card (SFSC) on two different groups of students as a method to nurture the creativity, innovative and entrepreneurial mindset in teaching and learning process. In essence, it can begin discovery for the preliminary investigation on the extent to which this innovative smart flashcard can influence the improvement in the results of the students.

2. LITERATURE REVIEW

The interactive learning activity is very effective to simplify the learning process to the targeted audience. It was demonstrated by Kierulff (2006) when he designed the Newco Case to get the audiences to engage in his lecturing method. The Newco Case, a detailed financial statements is an example that was purposely constructed to be used as a tool to acquaint the attendees to the challenges of financial management. The Newco Case was created to facilitate understanding in a simple and smart way in preparing the financial statements in many ways. The case was presented well to three different venues which involved entrepreneurs, attendees of financially troubled companies as well as the students in field of finance at university. The results showed that the interactive learning approach developed by the teacher enhances the teaching quality. Besides, the same issue was pointed out by Gaspar and Mabic (2015) in addressing the student engagement and quality teaching in higher education. They had conducted a research on the students' perception of Accounting Information System course in order to get the crucial feedback on what works well and what are the methods needed in teaching delivering process. The findings from the research are very important as guidance on what were the things highlighted by the students. The results confirmed the importance of students' engagement in teaching process. Furthermore, Akey (2006) emphasized that teachers play the main role in constructing the active learning process. That is why teachers should be creative in finding the most suitable approach to be used in teaching and learning process.

On the other hand, the creative method of teaching includes using teaching aids or improvising teaching aids when teaching in class. Therefore, using flashcards, which has been revealed by the previous studies, is one of the factors in improving the teaching quality for teachers. This can be supported by Adelabu and Matthias (2013) as well as Usman and Mustafa (2014) that emphasized on the improper method used by teachers could be one of the factors in contributing to the ineffective teaching process. In addition, the study conducted by Komachali and Khodareza (2012) has shown the effects of flashcards in improving the students' vocabulary knowledge. It means that when flashcards are used in class as teaching aids, the students' skills are improved. Meanwhile, similar research done by Sitompul (2013) who supported this finding on the effective flashcards methods in contributing to higher performance in vocabulary mastery skills.

Meanwhile, another idea of interactive delivery method in teaching was discussed by Noraddin (2015) which focusing on university teachers in Malaysia towards using games as well as instructional and collaboration tools as an innovative method in fostering quality teaching. The positive results of the study on the attitude towards using games have indicated that teachers should start utilizing all the facilities and opportunities to create innovative and creative learning and teaching method in classroom. Similarly, Huang and Chong (2009)

revealed the significant improvement in motivation, achievement and attitude towards the subject with games integrated into classroom activities in comparison with the traditional learning environment class. Collectively, these studies outline a critical role for interactive learning environment in enhancing students learning motivation as well as improvising teaching quality in the classroom in which games have been used as the tools in the learning and teaching process.

While the previous studies which have been mentioned provide valuable information regarding creative and interactive teaching method, the elaboration on the innovation and entrepreneurial mindset should be explored in order to examine the perspective of entrepreneurial mindset and innovative teaching approach. Based on the findings by Lindberg, Bohman, Hulten and Wilson (2017), they had found that pedagogical intervention enhances the students' entrepreneurial mindset by measuring the pre and post evaluations of the students' opportunity recognition and individual entrepreneurial orientation. The intervention included the elements of self-directed learning which is a useful pedagogical approach in developing creative and proactive thinking in students. The results show the significant positive changes (enhancement) of the students' opportunity recognition and individual entrepreneurial orientation. In addition, the innovative teaching method requires the teachers to stimulate learning and encourage the students to find the solutions on the problems discussed in class (Bennett, 2006). Other studies that take similar research on innovation and entrepreneurship are those done by Harkema and Schout (2007) who looked at learner-centred approach in innovation and entrepreneurship education which concludes that students are the driver of the whole learning process, while Cao and Shi (2016) discussed on the importance of innovation and entrepreneurship education in establishing effective evaluation system of teaching quality. Overall, the general findings from this literature show that innovation is important to arouse the interest of the students and create in them an entrepreneurial mindset which is more focused on the learner-centred.

3. METHODOLOGY

The discussion of the elements required in fostering quality teaching has been emphasized in Institutional Management in Higher Education (IMHE) Guide for Higher Education Institutions written by Henard and Roseveare (2012). One of the key elements needed by the teachers in encouraging quality teaching is related to the quality of learning engagement. This project is related to the improvement in learning environment of banking students in understanding the basic financial statements in the subject of fundamentals of finance. A Smart Financial Statement Card (SFSC) was designed to overcome the difficulties of the students to understand the items in financial statements and help them to demonstrate how income statement (statement of profit and loss) and balance sheet (statement of financial

position) are interrelated. Furthermore, this coloured and interesting smart flashcard supports the requirement by the government in encouraging conducive learning environment through innovation in teaching and learning. Based on the early findings, it can be seen some advancement in the result of the first evaluation of the financial analysis topic when comparing the results of with and without the smart flashcard applied in class.

In the Finance subject, financial statements are the final product of the accounting process. Therefore, the items presented in the financial statements encompass the transactions for the whole period concerned (Kok, Weina, Marimuthu & Bhattacharya, 2013; Haniff, Nawawi, Abd Samad & Mohamed, 2014). The difficulty the students have in understanding the differences between items in the balance sheet as well as the construction and explanation of the items in income statement have encouraged the teachers to come up with something innovative and interesting to make each item under balance sheet and income statement is better understood. Hence, the coloured and interesting Smart Financial Statement Card (SFSC) has been designed to help students to clearly differentiate the items and demonstrate how income statement and balance sheet are interrelated. This smart flashcard implementation can be one of the methods needed by the teachers in encouraging quality teaching via innovation in learning environment and it is believed that SFSC as an innovative teaching approach which can liven up the learning process.

Besides, this smart flashcard is expected to enhance the students' skill in calculating the relevant topic under financial analysis. This smart flashcard can be inserted in the learning materials and very useful not only for the targeted banking students but it can also be used by the accounting students. This smart flashcard will provide a solid foundation of items in financial statements (balance sheet and income statement) as well as examples from real-life scenarios of business. In addition, the coloured diagrams and coloured tables have also been included in this smart flashcard to make the items under each category better understood. The Smart Financial Statement Card (SFSC) was designed in such a manner to provide a concept of user-friendly flashcard, easy to carry and easy to read.

The preliminary investigation was conducted to study the effectiveness of using smart flashcards on two different groups of students (control and experimental group) in order to know how efficient this technique could be. Therefore, a t-test was used to compare the means of these two groups. There are two types of t-test, which are known as the independent t-test and the paired t-test. The independent t-test is associated with the comparison on two groups which are independent with each other. Meanwhile the paired t-test is related to the comparisons between two groups which are dependent with each other (Kim, 2015). A t-test is also known as student's t-test. The t-test is useful in determining a real difference as defined by statistics whether there is a statistically significant difference between the means of two groups. The variables used in this test are defined as dependent variable (test variable) and independent

variable (grouping variable). The experiment using the smart flashcard was administered to the experimental group that consists of 56 banking students. Meanwhile, the control group that consists of 62 business studies students were taught in the traditional way without the smart flashcard. The null hypothesis (H_0) and alternative hypothesis (H_1) of the independent sample t-test can be expressed by the following:

H_0 : There is no significant difference between mean scores of experimental and controlled group

H_1 : There is a significant difference between mean scores of experimental and controlled group

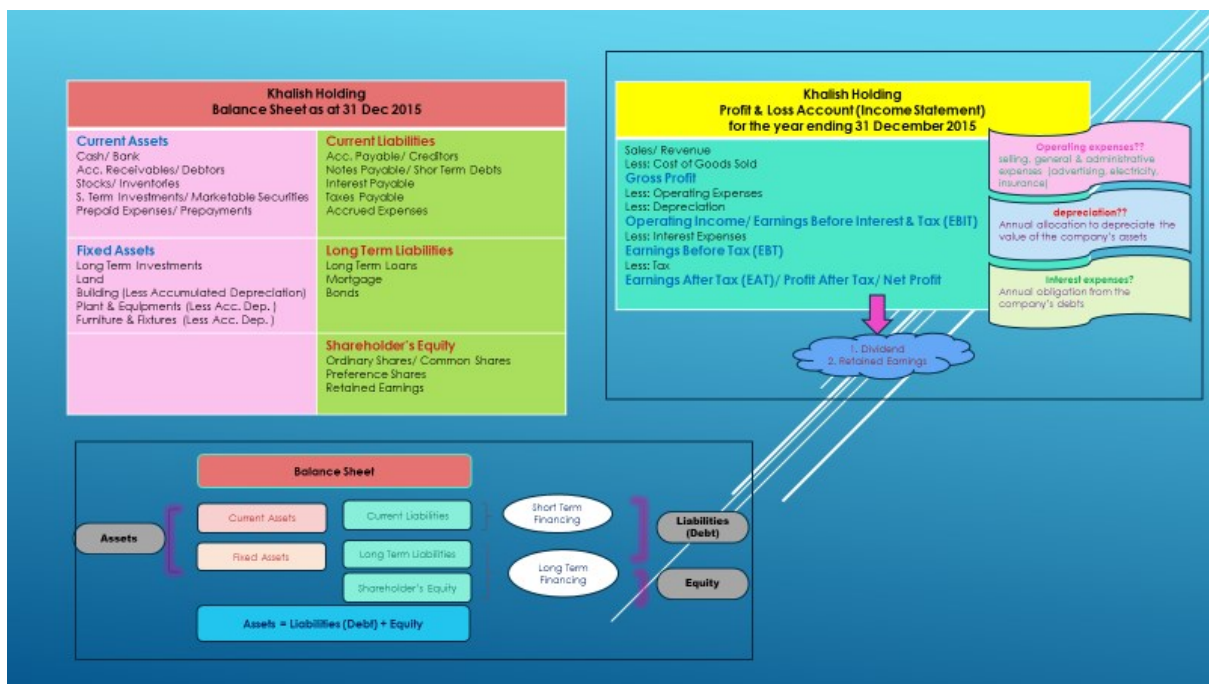


Figure 1: The Innovative Smart Financial Statement Card (SFSC)

4. PRELIMINARY FINDINGS

The result for group statistics as presented in Table 1 shows the mean for condition 1 or known as experimental group (with card) is 38.02. Then, the mean for condition 2 otherwise known as the control group (without card) is 27.47. The condition means are very important. It will indicate the magnitude of the difference between conditions and it will show which group has a higher mean. From the table, it obviously indicates that the experimental group has higher mean compared to the control group, indicating the better performance of the students with the SFSC from the control group. The standard deviation for condition 1 is 7.53 and for condition 2 is 7.32. The number of participants (N) in condition 1 is 56 while N for condition 2 is 62.

Table 1 Group Statistics

Condition	N	Mean	Standard Deviation	Standard Error Mean
1	56	38.0179	7.52569	1.00566
2	62	27.4694	7.31779	.92936

Table 2 Independent Samples T-Test

	Levene's Test for Equality of Variances		T-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	0.004	.951	7.714	116	.000	10.54850	1.36737	7.84026	13.25674
Equal variances not assumed			7.703	114.053	.000	10.54850	1.36933	7.83588	13.26112

The Sig. (2-Tailed) value in the Table 2 is less than 0.05. It can be concluded that there is a statistically significant difference between the mean for with smart flashcard and without smart flashcard. Since Table 1 revealed that the mean for with smart flashcard condition was greater than the mean for without smart flashcard condition, it enumerates that the students in the smart flashcard condition were able to get better result than the students without smart flashcard condition. Based on the result of Levene's test in the Table 2, equal variances assumed because the p -value (.951) is greater than 0.05. Thus, the result of t-test should be extracted from the top line. Therefore, it indicates the p -value (.000) is less than the chosen significance level $\alpha = 0.05$, the null hypothesis is rejected. From the result, there was a significant difference in mean for the group with smart flashcard and without smart flashcard ($t_{116} = 7.714, p < .05$).

Therefore, based on the preliminary investigation that was conducted to study the effect of using smart flashcards on two different groups of students (control and experimental groups) by using the independent t-test, there was a significant difference between the performances of these groups. The experimental group or known as condition 1 with smart flashcard has achieved higher score than the control group or considered as condition 2 without smart flashcard. This high score is related to the use of this smart flashcard in teaching the experimental group.

This preliminary result suggested that teachers are supposedly willing to foster good quality of teaching by utilizing smart flashcard as an interactive learning tool in their teaching process which proven the research done by Shen (2008) on the developing modern business environment should be accompanied by the change in the educational environment. Meanwhile, Lindberg et al. (2017) indicated the positive effect on the development of entrepreneurial mindset when the new intervention of creative and proactive thinking aspects included in the new course design. The finding is consistent with the previous literature by Harkema and Schout (2007) who had found that learner-centred approach is important in innovation and entrepreneurship education. Furthermore, the concept of innovation and creativity is related to entrepreneurship because creative and innovative are important in the formulation of business ideas as well as in every stage of business development and execution. Therefore, in order to fulfil the changes in the way of students' involvement in class, teaching and learning should provide suitable knowledge and skills for students which are trained for management and entrepreneurship. This interactive approach in education creates active participation of students in classroom atmosphere and at the same time it encourages the entrepreneurial mindset especially in problem solving, making decision as well as flexible adaption to new situations. Those attributes show the characteristics of a good entrepreneur.

5. CONCLUSION

In fostering quality teaching, the involvement of the entire institutions is very important. It includes the participation from the institutional level, programmes level as well as from an individual level. The focus of this innovative teaching approach is to explore the individual level that encourages teachers to innovate and create adequate strategies of teaching to promote the conducive and interesting learning environment. Therefore, the Smart Financial Statement Card (SFSC) is designed to help students to link with the basic theory and concept in fundamentals of finance and accounting. Besides, this smart flashcard is a vital material towards enhancing students' skills in understanding the items categorized in financial statements. Therefore, it is recommended that teachers should design one smart flashcard for each chapter in order to simplify the learning process especially when the students should focus in understanding the difficult items and do the calculation at the same time. In addition, teachers should incorporate smart flashcard into activities and instruct the students to use the attractive card to make sure the learning objectives are completely meet. The preliminary findings can be a starting point to any future research related to the usages of interactive learning activity in higher education and the teachers are supposedly willing to come up with the innovative ideas in enhancing their teaching efforts to encourage students' engagement in classroom and

ultimately to instil the entrepreneurial mindset among the students. As a result, future creative young entrepreneurs could be produced after they have graduated.

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