

**EFFECTS OF LEARNING STYLES ON STUDENTS’
PERCEPTIONS OF ENTREPRENEURSHIP COURSE
RELEVANCE AND TEACHING METHODS**

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Abstract_ *Entrepreneurial pedagogy has gained more attention in recent studies as researchers have found that the means of content delivery is as important as the course content itself. The delivery should cater for differences in students’ learning. This is a descriptive study that used survey method in data collection. The study examines a total of 119 students’ perceptions of the teaching methods adopted by lecturers and the course relevance with respect to their learning styles using correlation and one-way ANOVA for relationship and differences among groups. The findings suggest that in general, the differences in students learning styles were taken care of by lecturer’s teaching methods and the course content, while there is a positive correlation between lecturer’s teaching method and course relevance. These findings suggest several courses of action for entrepreneurship education curriculum designers and entrepreneurial pedagogy. Individual learning preferences should be given adequate attention in entrepreneurship education curriculum development and pedagogy.*

Keywords: *learning style, entrepreneurship, course relevance, teaching method, entrepreneurial pedagogy.*

I. Introduction

The training of entrepreneurs has become a key issue in the new global economy and this has led researchers in recent years to show increasing interest in entrepreneurial learning, because entrepreneurship is the key to economic development [1]. Pihie and Bagheri [2] identified learning as pivotal in the process of developing entrepreneurs. According to Gelderen et al. [3] learning is a crucial matter for potential entrepreneurs, increasing the likelihood of short and long-term business success, as well as encouraging entrepreneurial behavioral or personality development. The entrepreneurial

process develops skills needed to be a successful entrepreneur through learning. However, these students have different learning preferences and entrepreneurship education seeks to satisfy the difference among learners. “One critical goal of an entrepreneurship program is to give the students an academically rigorous learning experience that translates into real-world value” [4]. It has been noted that the expected outcome of the program is not just to teach students about entrepreneurship but to prepare them for it, and this can only be achieved by making relevant the course content and learning process, and possibly, the learning environment, mainly by going beyond the boundary of the classroom and into the ‘real world’. Raudsaar and Kaseorg [5] suggest that the learning process should be flexible and have different design, bearing in mind the diversity of the learners in the target groups.

A. Entrepreneurial and Experiential Learning

Learning in entrepreneurship is either learning about or learning for. While the former get learners acquainted with entrepreneurship principles, the latter is concerned with entrepreneurial practices. Gilbert [6] found that educators globally are being encouraged to look for new ways of designing and delivering higher educational courses that are efficient in developing graduates that are productive. Gilbert argues that ‘for educators in the entrepreneurship and innovation field this push is even more explicit for most developed and many developing countries have strategic policies that focus on producing more enterprising cultures’. The main essence of learning is to effect desirable changes in the

learner's behavior. Kakkonen [7] emphasizes that 'entrepreneurial learning of students aims at new kind of behavior for the present and for the future'. The ability to effectively involve others in the process of venture creation is therefore a very crucial part of entrepreneurial education [8]. Higgins and Elliott [1] recognise that the reach of complete entrepreneurial learning and higher education should be expanded beyond the academic and training institutions by inculcating innovation, discoveries and experience into the contents, which challenges traditional orthodox pedagogies'. They further emphasize the essential need to highlight the effect of reflective practitioner, the relevance of learning as a crucial part of the social system, and the importance of critical events as the main issues of entrepreneurial education and learning. Fayolle [9] is of the belief that the entire process of entrepreneurial learning can be improved if trainers and educators can concentrate more on the unique training needs of individuals when designing and developing their contents. Fayolle established a link between entrepreneurial education and growth support scheme for new graduate entrepreneurs. Furthermore, it was observed that healthy relationship with the university has facilitated the emergence of enterprise projects in the region. Entrepreneurial Learning through experiential learning can, in pragmatic way connects the students with the real world of work through regional enterprise projects.

B. Entrepreneurship Course Content

Entrepreneurial learning is expected to bring about behavioral change in the learning, if the expected outcome is to be achieved, attention should be given to what is delivered to the learners in form of content as well as the mean of delivery. A recent study by [10] has linked entrepreneurial intention and interest among student to course content. Entrepreneurship course content should focus on activities that will develop the expected entrepreneurial competencies of learners [11]. In

order to develop these competencies, Kontio [12] suggests that entrepreneurs should be involved in the planning and designing of course content and make sure the course content is relevant to all field. The course content should "provides an important mechanism for introducing students to the everyday management problems and opportunities of small businesses, particularly those at the start-up and early growth stages" [13]. To successfully achieve the desired course outcome, entrepreneurship courses must combine the whole course content with real world situation that is helpful to the students.

C. Learning Styles

"Learning can be seen as a cognitive process of acquiring and structuring knowledge, of making meaning from experience and of generating new solutions from existing knowledge" [14]. While Gelderen et al. [3] defined learning styles as personal approach to learning and learning behaviours of individual learner. According to [2] "learning styles play an important role in learning entrepreneurship at university".

Students learn in different ways and attentions should be given to learner differences in order to accommodate all learners in the learning process [7]. "However it is possible to develop instructional design to accommodate all learning styles through active learning" [15].

According to Kakkonen [7] "effective learning involves a complete sequence of a cycle. Each stage is important not only in achieving completeness, but because each improves learning in the next stage of the cycle".

According to [16] the four-stage learning cycle depicted in Figure 1, 'immediate or concrete experiences are the basis for observations and reflections. These reflections are assimilated and distilled into abstract concepts from which new implications for action can be drawn. These implications can be actively tested and serve as guides in creating new experiences.'

D. Research Objectives

The main objectives of this study are as follow:

- 1) To examine the effect of learning styles on students’ perceptions of entrepreneurship course relevance.
- 2) To determine whether learning styles

affect students’ perceptions of lecturer’s teaching methods.

- 3) To examine the relationship between lecturer’s teaching methods and entrepreneurship course relevance.

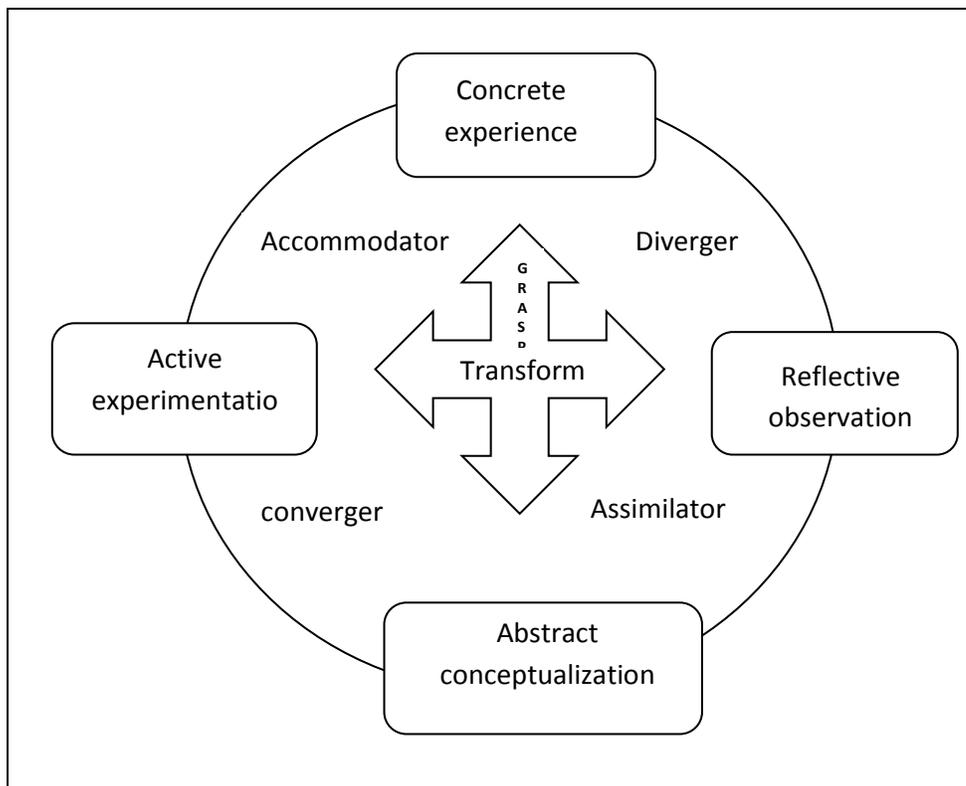


Figure 1
Experiential learning cycle and basic learning styles (based on Wolf and Kolb, 1984)

E. Research Questions

- (1) Is there difference in students’ perceptions of entrepreneurship course relevance based on their learning style?
- (2) Is there difference in students’ perceptions of

lecturer’s teaching methods based on their learning style?

- (3) Is there relationship between lecturer’s teaching method and entrepreneurship course relevance?

Table 1
Learning styles (based on Wolf and Kolb, 1984)

Learning Style	Strengths	Dominant Learning Ability
Convergent	Practical application of ideas	AC and AE
Divergent	Imaginative ability and generation of ideas	CE and RO
Assimilation	Creating theoretical models and making sense of disparate observations	AC and RO
Accommodative	Carrying out plans and tasks that involve them in new experiences	CE and AE

II. RESEARCH METHODOLOGY

This is a descriptive study using survey method in data collection. A total number of 119

undergraduate students of vocational education from faculty of educational studies, University Putra Malaysia were surveyed. Questionnaires

were distributed in three entrepreneurship classes and the students were given brief description and purpose of the study before answering the questions therein.

A. Instruments

The study made use of a seven-point Likert-like scale starting from 1 =strongly disagree to 7=strongly agree. The sections in the questionnaire comprised of the respondents' background, teaching methods of lecturers with ten items

developed from the work of [18] and course relevance with five items which was adapted from [19]. In addition, students' learning styles were also examined using learning style inventory adapted from Kolb and McCarthy. The Statistical Package for the Social Sciences program (SPSS) version 20 for windows was used to analyze the data.

III. RESULTS

Table 2
Description of variables

Variables	Frequency		Percentage
Gender		(n=119)	
Male	35		29.4
Female	83		69.7
Missing Data	1		.8
Race		(n=119)	
Malay	113		95.0
Chinese	2		1.7
Others	3		2.5
Missing Data	1		.8
Entrepreneurship related course taken		(n=119)	
One	33		27.7
Two	66		55.5
Three	20		16.8
Learning styles		(n=119)	
Accommodator	19		16.0
Assimilator	47		39.5
Converger	20		16.8
Diverger	32		26.9
Missing Data	1		.8

From table 2 above, 35 of the students were males which are 29.4% of the whole, while the remaining 83 were females which are 69.7%. Racially, 95% of the respondents are Malay, 1.7% which is the highest are Chinese and 2.5% for others. Based on the numbers entrepreneurship related courses that students have taken, 16.8% have taken three entrepreneurship related courses,

while 55.5% of the students have taken two entrepreneurship related courses and 27.7% have taken one entrepreneurship related course. As touching learning styles, 39.5% of the students are assimilators which are the highest, 26.9% are diverges, while 16.8% are converters and 16% are accommodators which have the lowest.

Table 3
Item analysis based on lecturer' teaching method in terms of skills

S/No	ITEMS	Mean	S.D
1	Our lecturer always diversifies teaching and learning methods in entrepreneurship courses	5.47	.985
2	Our lecturer put a clear understanding and correct application of teaching and learning in entrepreneurship courses	5.52	.973
3	Our lecturer takes logical and systematic approach for each activity in teaching and learning entrepreneurship courses	5.55	.930
4	Our lecturer uses external source (Internet/seminars/journals) in teaching and learning entrepreneurship courses	5.47	1.170

5	Our lecturer is more comfortable using traditional methods (Chalk and talk) in teaching and learning entrepreneurship courses	4.38	1.789
6	Our lecturer creates relationship between the subject matter with the real atmosphere of entrepreneurship globally	5.48	1.141
7	Our lecturer associates the current technological development of business opportunities to the students in teaching and learning entrepreneurship courses	5.47	1.192
8	Our lecturer practices controlled openness to all students in developing entrepreneurial characteristics according to their own patterns and moods	5.47	1.178
9	Our lecturer is concerned with achieving the objectives and learning outcomes of a topic particularly in entrepreneurship education courses	5.63	1.024
10	Our lecturer often conducts an assessment of attitudes, interests and characteristics of entrepreneurship courses among your students	5.48	1.104

Table 3 shows the result of items analysis based on lecturers' readiness and skill to teach entrepreneurship courses as perceived by the students. The finding shows that the mean scores for the lecturers' concern to achieve the objectives and learning outcomes is the highest ($\bar{x} = 5.63$). This is encouraging because if the overall objective is to produce entrepreneurs and each component of this is achieved during each lesson which will help in the achievement of the overall objective. The mean score for lecturers using traditional teaching method which has been found

lacking in instilling entrepreneurial skills is the lowest ($\bar{x} = 4.38$). The content of any entrepreneurship course is not enough, but the means of the delivering the content also matters which in recent years has led to increase attentions on entrepreneurial pedagogy [20].

Table 4 shows students' perceptions of course relevance. Majority of the students believe that the content of courses is current and relevant to the future. Moreover, the students' perceptions of the practical content of course are encouraging.

Table 4
Course relevance

S/N	ITEMS	Mean	Std. Deviation
1	The content of entrepreneurship related courses in my program is relevant to my future	5.52	1.088
2	The actual content of this course correspond to the descriptions in the synopsis	5.44	1.012
3	The content of this course is current	5.54	1.022
4	The quality of the practical content in this course is good	5.64	1.054
5	The content of this course is important to me	5.63	1.080

One-way between-groups ANOVA was used to examine if there are differences in students' perceptions of course relevance and lecturer' teaching methods among learning styles. There was no statistically significant difference among groups with respect to their learning styles on their perceptions of course relevance as determined by one-way ANOVA ($F(3,112) = .777, p = .509$). While it is the same for lecturer's teaching methods, that is, there was no statistically significant difference among groups as regard to their learning style on their perceptions of lecturer's teaching methods as determined by one-way ANOVA ($F(3,110) = 1.541, p = .208$).

A Pearson correlation was run to determine the relationship between lecturer's teaching method and course relevance. There was a strong, positive correlation between lecturer's teaching method and course relevance, which was statistically significant ($r = 0.685, P < 0.0005$).

IV. DISCUSSION AND CONCLUSION

This study focused on learning styles of students in an entrepreneurship course and how these affect students' perceptions of lecturer' teaching methods and the relevance of entrepreneurship course. Furthermore, it also examined the relationship between lecturer's teaching methods and the students' perceptions of

course relevance. Concerning the difference in students' perception of entrepreneurship course relevance based on their learning styles, there is no significant difference. The most interesting finding was that students in respectful of their learning styles believe that the course is relevant. Another important finding was that the result revealed that there is no significant difference in students' perception of lecturer's teaching methods based on their learning style. It is also interesting to note a strong relationship between lecturer's teaching method and entrepreneurship course relevance.

These findings suggest that in general the differences in students learning styles were taken care of by lecturer's teaching methods and the course content. Consequently, all the students with their different learning preference viewed the teaching methods as satisfactory and the course content as beneficial.

Since the goal of entrepreneurial learning is to bring about changes in learners' behavior, learning style of students play a pivotal role in entrepreneurship course design in order to produce generation with an enterprising culture. These suggest several courses of action for entrepreneurship education curriculum designers and entrepreneurial pedagogy. Individual learning preferences should be given adequate attention in entrepreneurship education curriculum development and pedagogy so as to make the course contents relevant to all learners.

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