



Is the Impact of Entrepreneurship Education as Remarkable as the Demand?

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Abstract

The foredeal of entrepreneurship is tremendous in all ratification of life. In fact, it is education is spreading in all levels of education worldwide. Despite the quantum number of current and expanding educational programs in this domain, several institutions are constantly questioning the value of investment in the entrepreneurship education (EE) programs. Is the result of EE programs as notable as demand? In the contest, what is the impact of the enterprise programs on their student's competitiveness and sustainability in the labour market? On pondering these questions, this research aimed to investigate how EE program had impacted on the student's business reality in the public universities, in Malaysia. Quantitative research method employed. The findings established positive impact and provided valuable insights for all the stakeholders of EE programs in the higher learning institutions.

Keywords: Entrepreneurship, Education, Educator, Malaysia.

1. Introduction

The Malaysian government special interest on education is because it is suppose to heighten national's ability to succeed in the global market. The recent consensus on the graduating student is to master how to develop value for others, via pragmatic use of their robust scholastic expertise. Hence, scholars deem that entrepreneurship knowledge will prime young graduates for flexibility and adaptability in the competitive labour market and solidly increase the socio-economic value in Malaysia. Consequently, acceptable and inspiring approach to multiply value-adding knowledge into play is through entrepreneurship education programs (EEP) in the tertiary institutions (Cheng, et al., 2009).

In every society today, huge socioeconomic and educational success of the entrepreneurship reported. Now, EEP are propagating in the entire education system across the globe and Malaysia is no exception. In the yesteryears, few universities offer entrepreneurship as a program or module in their course structure, but today entrepreneurship is a household name in the academic circle. In the case of Malaysia, today, the higher learning institutions (HLIs) had EEP compulsory (MOHE, 2010).

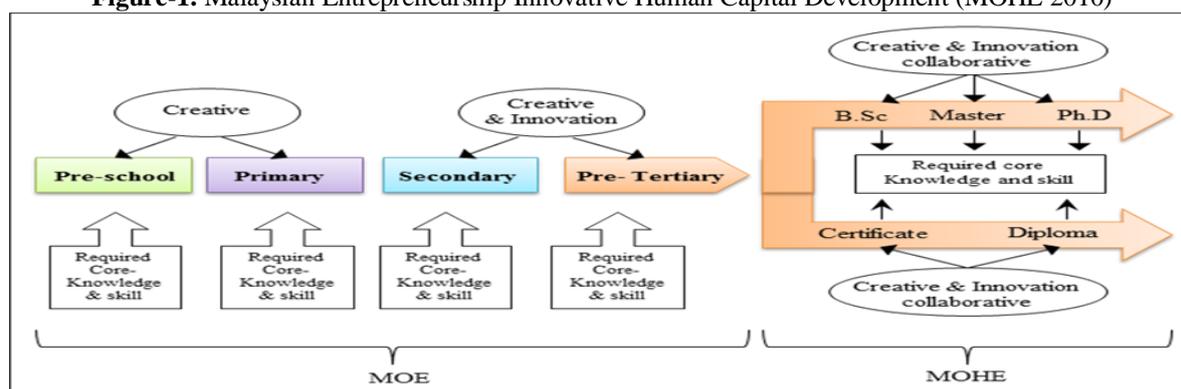
Nevertheless, the quantum number of current and expanding educational programs in the entrepreneurship domain, the policy makers, institutions and society are now questioning the value of investment in the program. In fact, several scholars in the academic circles are questioning whether the result of EEPs as notable as demand. Hence, to be more specific on the inquiry, what is the impact of the EEPs on the student's competitiveness and sustainability in the labour market? On pondering these questions, this research aimed to investigate how EEP had impacted on the student's business reality in the public universities in the Malaysia context.

However, longitudinal survey in the course of quantitative research methodological approach employed and structure questionnaires distributed to the Real Estate Management (REM) students on a purposive sampling ground. The collected data analyzed with the statistical package for social science (SPSS). Why the REM students as the respondent target? The simple fact is that REM profession is the topmost on the list of most encroached profession in the built environment. Likewise, quacks pose more threats than other professional's invasion (Wilson Rangga, et al., 2011; Olawande & Adebayo, 2012; Ashen & Gambo, 2012). In sum, this paper structured into four sections and conclusion part will provide valuable insights for all the stakeholders of EEPs in the higher learning institutions and government policy makers.

2. An Overview of Entrepreneurship Education in Malaysia

In the academic circle, EE is a watchword qualified with different grammatical expression. From the literature, EE has been distinguished as enabler; driver; transformer; and facilitator of business reality, value creation, change management, competitiveness and sustainability, and launch pad of socioeconomic and political development (Wu & Li, 2010). Hence, many researchers have offered different theoretical and empirical findings on the impact of entrepreneurship on the national economic transformation, but little investigate the impact of it is education on the students of HLIs particularly in Malaysia. Recently, educational policy makers have intensified focus on entrepreneurship, commercialization and innovation worldwide. In Malaysia, however, the policy formulation and implementation of the national strategy for entrepreneurship and commercialisation in the tertiary institutions of education has been the obligation of the Ministry of Higher Education (MOHE, 2010). In 2010, Malaysian Youth Entrepreneurship initiatives established to boost the advancement and spread of entrepreneurship skilfulness across the entire education system from elementary to PhD (See fig. 1).

Figure-1. Malaysian Entrepreneurship Innovative Human Capital Development (MOHE 2010)



The objective is for more students to gain entrepreneurship know-how, subsequently, develop their potential to innovate and act entrepreneurially after graduation. The Malaysian's ideology on entrepreneurship is that her future competitive capacity in the form of the knowledge-based economy will be strengthened by the entrepreneur of the new generation. The entrepreneurs of the new age are to create and transform businesses by recognise opportunities and develop ideas by way of value motivated through illuminated reorientation in enterprise proficiency, in the HLIs.

In fact, MOHE instituted compulsory entrepreneurship syllabus (Yasin, et al., 2011; Yusof, et al., 2010; Cheng, et al. 2009) for all public and private institutions of higher education in Malaysia to introduce soft skill elements and set up entrepreneurial culture module (Ismail, et al., 2010). Hence, it

formerly launched EEP in all the higher learning institutions in order to boost the entrepreneur development among the graduating students.

Regardless of all the aforementioned resourcefulness, less than 2 percent of graduate become an entrepreneur over a period of 2010 to 2012 after completion of their program of studies reported by MOHE. Now that EEP is compulsory, most of the universities still champion different objectives. According to Fayolle, et al., (2006) recorded that EEP's purposes falls within two paradigms: teaching "about entrepreneurship" or "for entrepreneurship" exclusively. Moreover, most general purpose of the EEPs objectives are to facilitates students' consciousness about entrepreneurship idea and skills to provide more small medium enterprise for the national economic development. In the nutshell EEP is to equip students with the competitive and sustainable skills for new business start-up, improve the existing ventures and their management.

However, entrepreneurship education teachability validated to a reasonable extends (Fayolle, 2007; Kuratko, 2005; Matlay, 2006). Even though, few scholars still disagreed (Lautenschlager & Haase, 2011; Haase, & Lautenschläger, 2011). The question on whether entrepreneurship can be taught now replaced with what should be taught and how it should be taught. At the same time, consensus among the university's scholars on the homogeneity of the entrepreneurship course contents is still a mirage. Thus, notable scholars suggested different course content on the ground of different socio-economic, cultural and environmental factors. Justification for their agreement is that, innovative concept for the EE development can only be guaranteed with the collaboration of scholars with diverse teaching methodological approaches from various professions (Kuratko & Audretsch, 2009; Mueller 2011; Jones, & Iredale, 2010).

The critical issue is that, despite, the growing number of EEP available in the HLIs, the student's employment opportunities and business start-up is still questionable (Galloway, et al., 2006). Hence, if the quantities of EEPs are on the increase, at the moment the quality of such programs questioned (Gerba, 2012; Matlay, 2008). Apprehension is currently on demand to evaluate the impact of the EEPs on the student's competitiveness and sustainability in the labour market. In fact, there is a need to justify the value of investment on the EEPs in the Malaysia HLIs? On this account, the research designed to look into how EEP had impacted on the Real Estate Management (REM) student's business reality in the public universities, in Malaysia.

2.1. Assessment of Entrepreneurship Education Programs

This section of the paper gives a synopsis of past contributions in the domain of EEP assessment. In addition is to highlight key evaluation discuss: Who does evaluation? What are the methods and procedures to be used? When to do the evaluation? Dissemination of findings is also a critical, should recommendations be disseminated in the same way? Likewise, key objectives for assessing EEP in the HLIs are to establish the performance of the program as feedback for the entrepreneurship educators, policy makers and the public. Hence, to improve entrepreneurship policies at the academic community and mainstream policies that nonetheless influences entrepreneurship development. The status of this research focus not, on the instantaneous new venture creation after graduation, instead discussed academic entrepreneurship; it is the aim and objectives, pedagogy and value created on the students of the HLIs in Malaysia.

Evaluation of any educational programs only shows the levels of importance attached to the program. Assessment of the same program could be instituted by the provider of the program (educator) or funding agency (public/private) of the program. As earlier noted, the key challenge in the EEP is the voracious multiplication of the program in public/private institutions with no set of standard to evaluate their quality (Cheng, et al., 2009; Gerba, 2012; Raposo & Paco, 2011). As a matter of fact, the huge capital and human resources allocated from both government and academic community demand feedback on the effectiveness and efficiency of such programmes. The prominent question in the academic entrepreneurship research is how impressive is the entrepreneurship education performance (Matlay, 2006; Von Graevenitz, et al., 2010; Penaluna, et al., 2012). Is enterprise education as impressive as demand, posed by Charney, & Libecap, (2001)? All this waves of questions, is an indistinct representation of the need to research this gap, which exist between the rhetoric performance assumption and actual entrepreneurship program achievement.

In addition, Matlay (2008) study posed "entrepreneurship for all or few?" as well as "entrepreneurship education does it matter?" All these are clear questions of reasoning that demand genuine and unambiguous answers. This can be explained by determining whether students that

participated in the EEP do attained a higher level of entrepreneurial know-how toward self-employment as a career choice.

However, Keat, et al., (2011) and Blenker et al. (2011) submitted that EEP's objectives should be the yardstick for the evaluation (Matlay, 2008). They further noted that such objectives should affix on two key definitive course of action, which is teaching "about entrepreneurship" or "for entrepreneurship". Hence, outlined a range of pedagogical approach in regard to program objectives and mission and vision of the institution. Gafar, et al., (2013) stressed that EE pedagogy can either be a declarative or function, and it could be discovery or creation in nature. Most importantly is that it must inspire skill ingenuity, creativity and innovation, risk taking proficiency, educators and educatees interactive on action-based learning culture. Gafar et al., (2013) classified and validated the impact of real life training approaches (case study, teamwork project, entrepreneur's site visit, practical workshop training) for the entrepreneurship teaching in HLIs.

Nevertheless, the literature submits no acceptable assessment framework, therefore, Fayolle, et al., (2006) assessment model adopted within the facilities management principle. Therefore, entrepreneurship-facilities management assessment model (EFMAM) proposed for this investigation. This theoretical assessment framework developed from the process nature of entrepreneurship and introduced the concept of the input, process and entrepreneurial outcome. Moreover, EEP acclaimed as a process that revolves around building a series of educational/business activity for the trainee (students) to gain the require skills to become an entrepreneur in the future (Fayolle & Gailly, 2008). Then, we expanded on the Van Der Veen and Wakkee, (2004) three stage entrepreneurial process, starting from idea; start-up and result into a four stage process of entrepreneurship (see fig. 2).

Consequently, the transformation of the entrepreneurial process into four steps, stressed that "intention-phase" to precede all other stages of entrepreneurship process (Wu & Li, 2010; Ahmed, et al., 2011; Kureger, et al., 2000; Luthje & Franke, 2003). Therefore, in philosophy "intention to start business" connotes the launching success of all the other part of entrepreneurship advancement.

In the same respect, empirical studies of Wu & Wu (2008) and Laviolette, et al. (2011) reaffirmed those students with entrepreneurial proficiency attributes has a short duration to venture creation after graduation and same students have higher intention score. Therefore, intention is a better predictor of behaviour in compares to other sociological variables (Franco, et al., 2010; Ajzen, 1992). The graphical illustration of the entrepreneurial process, therefore, serve as a preliminary framework suitable to serve as a model for this research proposal (see fig. 3).

Figure-2. Entrepreneurship education and scope of research assessment

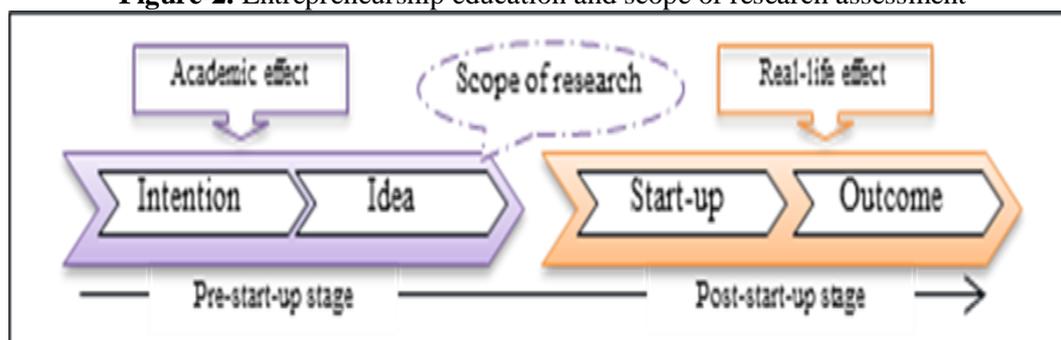
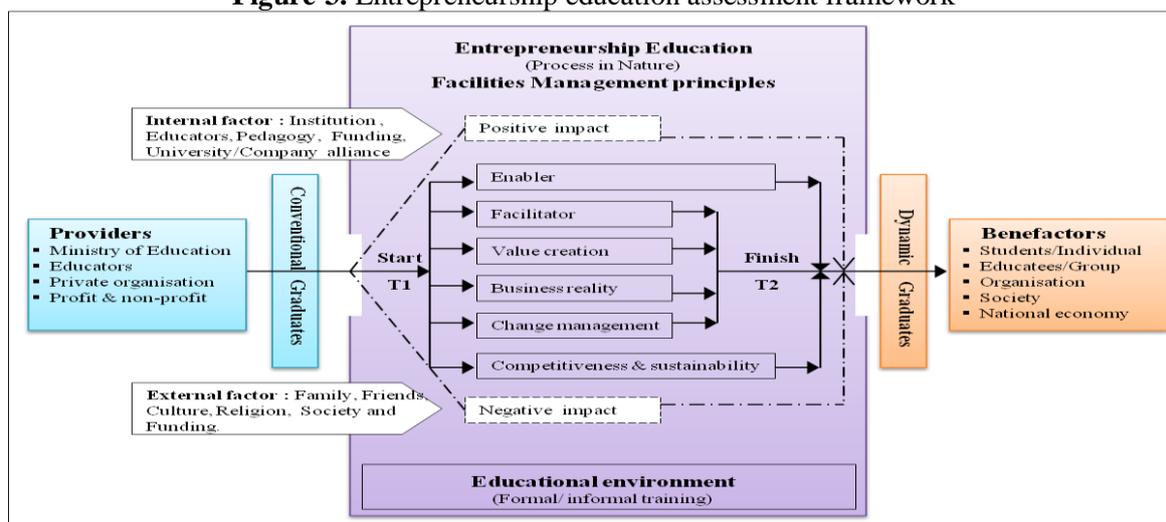


Figure-3. Entrepreneurship education assessment framework



Hence, catalyst to act is “intention” and this resultantly serves as an indirect approach to determine the impact entrepreneurship program on the students of HLIs. Entrepreneurship researcher noted that impact evaluation best established on the principle of “pre and post” assessment (Matlay, 2008; Fayolle, et al., 2006; Solomon, 2007; Gafar, al., 2013). Therefore, this research based on the pre-start stage of the entrepreneurial process within the academic community.

Nevertheless, impact evaluation of entrepreneurship education is a major challenge in the academic communities (Rideout & Gray, 2013; Solomon, 2007; Oosterbeek, et al., 2010). Commentators noted that, overall assessment of the enterprise education best view in the perspective of the contribution on social and economic of a nation (Henrekson, & Johansson, 2010). While other commentators, perceived such scale of assessment and post venture creation as a long time outcome based assessment inherent with many limitations (Cheng, et al., 2009). However, many of the past research in the area of entrepreneurship program assessment are empirically not suitable due to the time lag factors, heterogeneities and complexity of the program.

However, the current challenges in the assessment EEP in the HEIs are in the categories of programme design, pedagogical approaches as it relates to the quality and quantity of programme, teaching methodologies approaches (Fayolle, 2008; Matlay, 2008; Kirby, 2004). In yesteryears, Vesper and Gartner, (1997) reported that out of the 18 listed evaluation criteria, the topmost five are a number of courses offered, competency of educators, impact of the program on the student’s business reality and value creation capacity, quantity of business created and innovation development. On the contrary, Fayolle, et al., (2006) postulated five level entrepreneurship program assessments in HLIs (see table 1).

Table-1. Five level entrepreneurship education assessment criteria (Fayolle, et al., 2006)

Phases of assessment	Relevant assessment criteria
At the beginning and during the EEP	Student participation in entrepreneurship program (core or elective) Number and type of entrepreneurship courses
Immediately after the completion of the EEP	Test of general awareness and intention to act as entrepreneurs Knowledge gained (business reality and value creation) Self-perception of leaning and capacity development
Between zero (0) and three (3) years after the EEP	Number of business start-up and failure after created Number of entrepreneurial positions applied for and obtained
Above three and ten years after the EEP	Sustenance of created businesses (post start-up business success) Level of innovation and capacity for change by the firm
More than ten years after the EEP	Contribution to the society and the economy Business performance Level of satisfaction with career.

The shaded area on the table represents the current scope of assessment on the EEP. The time is a critical factor for the assessment of EEP at the stage three, four and five. As a matter of fact, these

stages can only be assessed on a longitudinal range of ten to fifteen years which are far beyond the university or any institutional setting. Despite, Luthje and Franhe, (2003) had identified other external factors (personality traits, background, culture, ethnicity, work experience and religion) on the entrepreneurial intention of graduating student. The scope of this research, therefore, focuses on the student while the future research focus will be on the educators and assessing the entrepreneurial activity of students after school.

3. Research Questions

As aforementioned, the purpose of this research was to answer the desired question on how impressive is the performance of EEP. Especially, assess the impact of the EE on the students of REM. Therefore, we seek to provide empirical declaration to some set research questions:

- a. How remarkable is the impact of EEP on the entrepreneurial intents of REM students?
- b. To what extend is the impact of EEP on graduating student's value creation?
- c. What are the pedagogies used to effect change management intents of the students?
- d. What is the influence of EEP on the student's perceived self-employment as a sustainable career option?

Therefore, objective of this research is to bridge the gaps that exist in the critical review of literature with regard to the impact of EE on the students of HLIs. Ultimately, the research goal is to examine how impressive is the EEP as agent of transformation.

4. The Research Methodology

Longitudinal research methodological approach employed to investigate the impact the EEP had on a purposive sample of 340 REM students. Data collected with structured adopted questionnaire, at the beginning of the EEP (T1) and on the completion of the program (T2). The data collection was carried out with structured questionnaires with repeated measures over two consecutive periods and matched pairs (longitudinal survey - a pre and post assessment). The purpose of the matched assessment of the EEP participants was to establish empirical answer to the pondered questions (is the impact of EEP as remarkable as demand?). In fact, student's entrepreneurial understanding of today may be a strong index for the reality of tomorrow (Kruegar, et al., 2000; Matlay, 2008; Laviolette, et al., 2011). The population purposively focused on four selected public universities that award degree in REM in Malaysia:

- (i) University Malaya
- (ii) University Technology, Mara
- (iii) University Technology Malaysia
- (iv) University Tun Hussein Onn Malaysia.

A 103-items structured survey questionnaire adopted and self-administered (Souitaris et. al., 2007; Gafar, et al., 2013). The reliability test found to be appropriate (minimum >0.89) and above recommended Cronbach's alpha of 0.6 (Creswell, 2013). The exploratory factor loading analysis established the validity of all the items of the questionnaire, and all cases are greater than 0.751 (David & Sutton, 2012). The respondents are to tick their responses on the constructed research questionnaire on a five likert scale of measurement (strongly disagree: 1 to 5: strongly agree). The two stages (pre and post test) data collection instrument administered to evaluate marginal influence of EEP on the student's entrepreneurial know-how. The positive or negative marginal value of the program would establish the worth of investment on the entrepreneurship education in the HLIs.

5. The Research Findings and Discussion

In order to answer the set research question, especially, is the result of EEP as notable as demand? The outcome of the finding analysed and interpretation outlined. However, exploratory factor analysis computed to establish the instrumentation validity. At the same time, descriptive data analysis and mean percentage between the two consecutive measurements (T2 – T1) employed to present the marginal effect of the EEP on the target respondents. In addition, regression correlation analysis used to test the effect of EEP on graduating student's business reality.

5.1. The Profile of the Sample (REM Students)

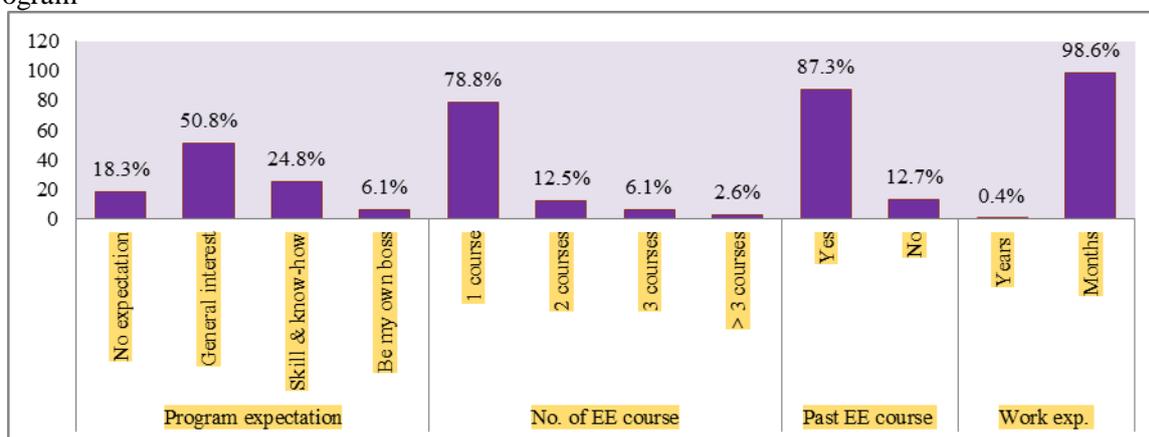
The sample total of the surveyed was 340 REM students. The sex proportion of the sample is 66.7 percent (female) and 33.3 percent (male). The ethnic in the representation were Malay (63.91%), Chinese (32.99%), and Indian (3.1%) respectively (see Table 2).

Table-2. Students' profile

	Frequency/Percentage		Frequency sub-total	Valid percentage	Cumulative Percentage
	Male	Female			
UM	17 (23.6%)	55 / 76.4%	72	21.1%	21.1%
UiTM	28 / 25.7%	81 / 74.3%	109	32.1%	53.2%
UTM	32 / 37.6%	53 / 62.4%	85	25.0%	78.2%
UTHM	18 / 62.2%	56 / 37.8%	74	21.8%	100%
Total	131 / 72.8%	49 / 27.2%	340	100%	

Figure 4 presented student's work experience as industrial attachment scheme accounted for 98.6% while no previous work experience is (0.4%). In fact, majority have taken part in EEP, in the past while those with single EEP experience is the majority (78.8%), two-EEP involvement is 12.5%, and three-EEP participation is 6.1%

Figure-4. Students' work experience, past EE courses and expectation on the entrepreneurship program



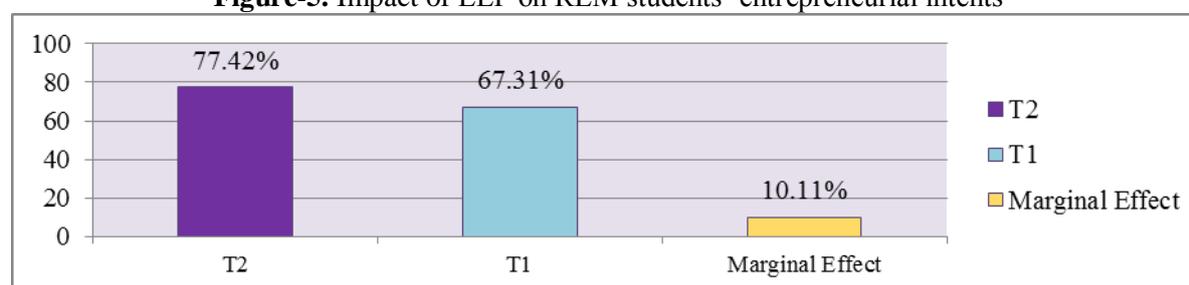
The student's expectation of the EEP falls with the general interest of 50.8% and follow is the interest to acquire business skills and competence. The least of all the student's responses to the expectation of the EEP is the interest to be their own boss. The explanation to this failing of interest could be as a result of compulsory pre-professional training after graduation, which may affect their preposition to start-up business. As the research instrument (questionnaire) administered few weeks of the program commencement. Established at the first stage assessment (T1) is a number of attitudinal, self-assessment of the respondents and program content evaluation. The second stage assessment survey (T2), this found the level of impact of the entrepreneurship program for distinguished gap between the two mean value (percentage mean score) at stage T1 and T2.

5.2. Impact of EEP on the Entrepreneurial Intents of the REM Students

The field survey revealed at the first stage (T1) assessment of the EEP, positive intents towards entrepreneurship after graduation and then the second stage (T2) assessment on the completion of the program presented a marginal increase (10.11%) on the student's future entrepreneurial intent (see fig. 5 and table 3). Therefore, EEP enhances the possibility of student's entrepreneurial intents positively.

Table-3. Impact of EEP on REM students' entrepreneurial intents

Item	T2-Mean (%mean)	T1-Mean (%mean)	Mean Difference	Percentage difference
I want to be entrepreneur	3.44 (68.70%)	3.21 (64.20%)	0.23	4.50%
My career goal is to be an entrepreneur	4.37 (87.30%)	3.15 (62.90%)	1.22	24.40%
I will make effort to start a firm	4.31 (86.10%)	3.01 (60.20%)	1.30	25.90%
I will make effort to run a firm	3.97 (79.30%)	3.63 (72.50%)	0.34	6.80%
I am determined to create a firm in future	4.92 (98.40%)	4.42 (88.40%)	0.50	10.00%
I have every thought to start a firm	4.86 (97.20%)	4.58 (91.60%)	0.28	5.60%
I am intending to start a firm within 2 years	1.26 (25.20%)	0.98 (19.50%)	0.29	5.70%
I am intending to start a firm within 5 years	1.94 (38.70%)	1.52 (30.30%)	0.42	8.40%
I am intending to start a firm within 10 years	4.88 (97.60%)	4.68 (93.60%)	0.20	4.00%
I am intending to start a firm one day	4.79 (95.70%)	4.50 (89.90%)	0.29	5.80%
Average (percentage and mean)	3.87 (77.42%)	3.37 (67.31%)	0.51	10.11%

Figure-5. Impact of EEP on REM students' entrepreneurial intents

Despite the student's strong inclination to entrepreneurship, nevertheless, their business start-up intents on completion of their professional program vary transversely (2years – 19.50% to 25.2%; 5years – 30.30% to 38.7%; and 10years – 93.60% to 97.6%). In fact, ten (10) years and above recorded utmost on the student's future projection to start a business (firm). Whereas, low perspective to start a firm within 2-5 years maybe as a result of long years of pre-professional training stipulated by the professional body before acquiring professional license. Therefore, EEP indeed impacted strongly on the REM student's intention to become an entrepreneur after considerable years of working experience. The finding supported the studies of Matlay (2008) and Ahmed, et al., (2011).

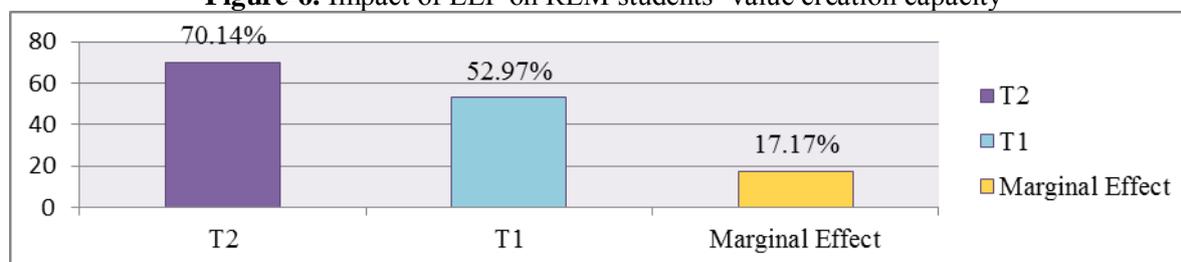
5.3. Impact of EEP on the Value Creation of the REM Graduating Students

Consequently, evaluated longitudinally (T1 and T2 assessment stages) was the impact of EEP on the REM student's value creation. The evaluation was within notable keywords such as creativity; innovation; networking; level of income; societal value; and freedom. Not surprisingly, all students reaffirmed remarkable value creation capacity after participated in the EE program, formatted in figure 6 and table 4 respectively.

Table-4. Impact of EEP on REM students’ value creation capacity

Item	T2-Mean (%mean)	T1-Mean (%mean)	Mean Diff.	% Diff.
It would enable me to be my own boss	2.29 (79.20%)	2.29 (45.80%)	1.67	33.40%
It would provide me self-confident to start business	1.63 (53.50%)	1.63 (32.50%)	1.05	21.00%
It would give me self-fulfillment to own - run business	1.92 (58.20%)	1.92 (38.30%)	1.00	19.90%
It would provide me opportunity to network socially	2.61 (56.80%)	2.61 (52.10%)	0.24	4.70%
It would facilitate me to use my personal skills	1.76 (51.10%)	1.76 (35.10%)	0.80	16.00%
It would enhance my business idea creativity	2.85 (72.50%)	2.85 (56.90%)	0.78	15.60%
It would enable me to be more innovative	2.49 (58.20%)	2.49 (49.80%)	0.42	8.40%
It would enable me to have financial freedom	2.97 (74.90%)	2.97 (59.40%)	0.78	15.50%
It would provide me freedom to control my life	1.06 (32.50%)	1.06 (21.20%)	0.57	11.30%
It would enable me to do thing my way	2.04 (49.40%)	2.04 (40.80%)	0.43	8.60%
It would give me respect and impact the society	0.98 (23.70%)	0.98 (19.50%)	0.21	4.20%
It would provide me career option	3.92 (91.40%)	3.92 (78.30%)	0.66	13.10%
Average (percentage and mean)	3.87 (70.14%)	2.65 (52.97%)	0.86	17.17%

Figure-6. Impact of EEP on REM students’ value creation capacity



Notable scholars qualified EEP as agent of value creation in all it is the purpose and ratification (Wu & Li, 2010). The responsibility of an entrepreneur is value finder. Hence, value fulfilment, promoter of innovation, and talent builder are all key benefit of EEP. In fact, EEP also endorsed as creativity enabler, catalyst for self-enhancement, and transformer of educational idea for societal value. Similarly is a transformer of attitude and intention change management for students. On this note, this research finding sustains all the attribute and purpose of EEP in the higher learning education.

Subsequently, we went further to assess the course content and teaching strategic methods employed to deliver EE which output the remarkable impact. The subsequent section provides a synopsis of the pedagogies used by the entrepreneurship educators, to outcome change management intents and remarkable value creation on the REM student.

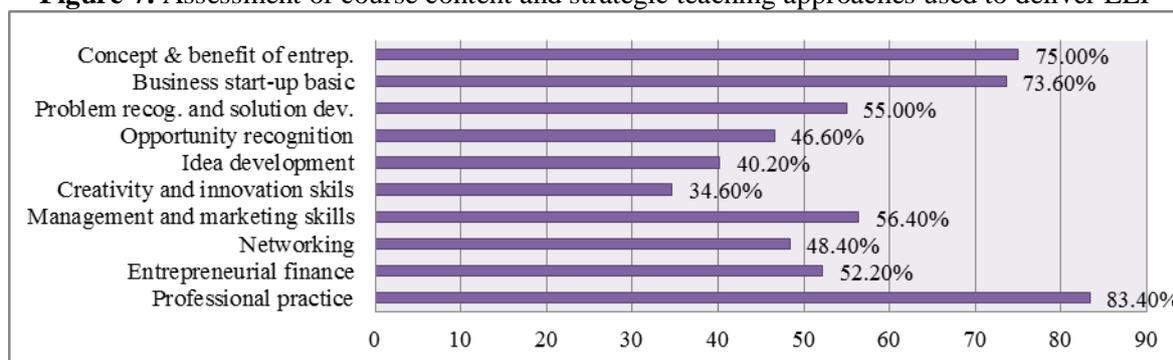
5.4. Assessment of Course Content and Pedagogies Used to Affect the Student's Change Management Intents

The findings on the course content and pedagogies (teaching strategic approach) used by the entrepreneurship educators varies across all the available methods. As aforementioned, EEP assumed to be considered as a homogeneous field, unfortunately, what should constitute the program content is still contentious among scholars. As presented in table 5, the assessment index for the EEP course content were extracted from the literature review (Chang, et al., 2009; Gerba, 2012; Oosterbeek, et al., 2010; Fayolle, et al., 2006) content analysis of the entrepreneurship programmes in the selected REM schools (see fig. 7 and table 5).

Table-5. Assessment of course content and strategic teaching approaches used to deliver EEP

Item	Mean	Percentage mean	Standard Deviation
Concept & benefit of entrepreneurship	3.75	75.00%	0.26
Business start-up basic	3.68	73.60%	0.37
Problem recognition and solution development	2.75	55.00%	0.51
Opportunity recognition	2.33	46.60%	0.35
Idea development	2.01	40.20%	0.74
Creativity and innovation skills	1.73	34.60%	0.73
Management and marketing skills	2.82	56.40%	0.33
Networking	2.42	48.40%	1.03
Entrepreneurial finance	2.61	52.20%	0.81
Professional practice	4.17	83.40%	0.22

Figure-7. Assessment of course content and strategic teaching approaches used to deliver EEP



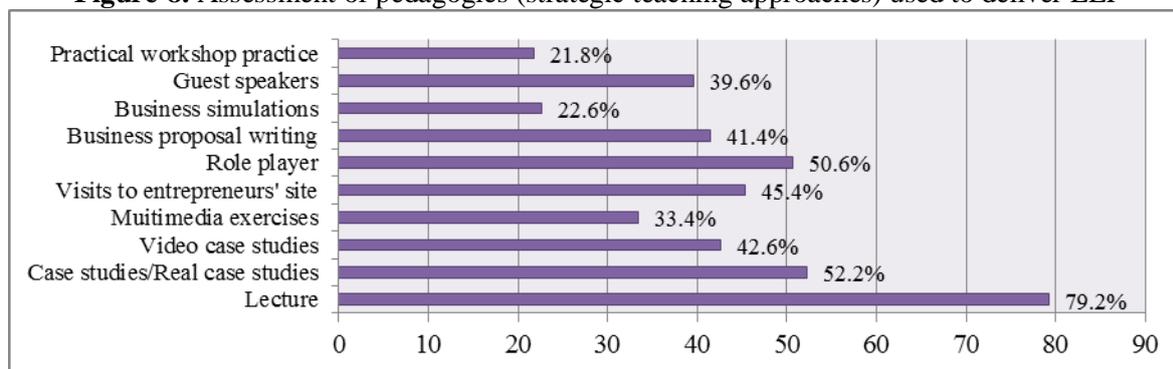
The course content assessment constituted measure of students' basic business knowledge and professional practice scored highest compare to the business reality indicator. The problem recognition, idea development, creativity and innovation, shows less rating on the percentage mean on the students' response.

However, evaluation of the EE teaching methods, students' recorded highest on the use of lectures teaching methodological approach over the other available medium. Lecture series approach recorded 3.96 mean (79.2%) on a 5-likert scale measurement, while, other teaching strategic approach scores were considerably used less (see fig. 8 and table 6). It is obvious that the action-based teaching approaches fall short of expectation, even though students recorded remarkable impact on their entrepreneurial faculty.

Table-6. Assessment of pedagogies (strategic teaching approaches) used to deliver EEP

Item	Mean	Percentage mean	Standard Deviation
Practical workshop practice	1.09	21.80%	1.07
Invitation of guest speaker	1.98	39.60%	0.83
Business simulations	1.13	22.60%	1.01
Business proposal writing	2.07	41.40%	0.24
Role player	2.53	50.60%	0.67
Visitation to entrepreneur’s site	2.27	45.40%	0.42
Multimedia business exercise	1.67	33.40%	0.63
Video case studies	2.13	42.60%	0.78
Real case studies	2.61	52.20%	0.57
Lecture	3.96	79.20%	0.31

Figure-8. Assessment of pedagogies (strategic teaching approaches) used to deliver EEP



According to Gafar, et al., (2013), functioning, discovery and creation-based didactics agreed to be more relevant in delivering EEP. Despite, declarative (lecture series) teaching strategic approach supported by the university’s curriculum structure and pressure with regards to examination assessment preferred declarative didactics. Remarkably, Malaysian schools of REM used a mixture of all teaching approaches for their EEP. This research finding supported the assertion that innovative concept for the EE development can only be guaranteed with the collaboration of scholars with different pedagogical approaches from various professions (Jones, & Iredale, 2010; Kuratko & Audretsch, 2009; Mueller 2011). On a critical evaluation, the course content is more of management and professional practice oriented. This may not sustain the entrepreneurial idea, creativity and innovative skills developed during the EEP for business start-up after graduation. We identified that there is a need to give attention to innovative business plans, business reports, presentations and in/outclass assessment, even though, course content and pedagogical approaches incorporated both theoretical and practical modules in the curriculum structure of EEP in all the selected schools of REM in Malaysia.

5.5. Evaluation of the Student’s Self-Employment Intents as a Sustainable Career Option

The respondent’s self-employment intention also evaluated and outlined below in the table 7. On the completion of the EEP, (T2) there were exponential increases on the respondent’s (students) percentage mean on the self-employment intention compare to the student’s intents at the beginning (T1) of the program. The mean percentage increased from 64.20% (3.21) to 77.0% (3.85).

The regression correlation analysis further employed to ascertain the level of influence EEP has on the REM student’s entrepreneurial intents, value creation and self-employment as a sustainable career option. The student’s entrepreneurial aptitude hold as a catalyst for self-enhancement and findings indicated strong significant. In the same result, the increment can be attributed, nonetheless, towards the statistically significant ($p < 0.035$), ($p < 0.014$) and ($p < 0.001$) increase in attitudinal mean scores for students’ entrepreneurial intents, value creation and self-employment disposition. In sum, there exist a strong relationship between self-employment ambition (intents) of the REM students

and impact of EEP. Those results were consistent with the theoretical and empirical studies of notable entrepreneurship researchers (Wu & Wu, 2008; Laviolette, et al., 2011; Matlay, 2008; Fayolle, 2006). Therefore, this research support the declaration of aforementioned scholars with evident that participation in EEP attributed to factors of entrepreneurship creativity and mobility for self-employment ambition and high prospect to business start-up in the future. Nevertheless, factors such fear of failure, risk taking and financial support scored highest as the impediment to the self-employment ambition by the students.

Table-7. Impact of EEP on the REM student's self-employment ambition

Measured variables	Items	Mean	Standard Deviation	
<i>T1 measurement:</i>				
Students' entrepreneurial intents	15	3.32	0.713	
Students' entrepreneurial value creation	20	3.65	1.249	
Students' self-employment ambition	15	3.21	1.514	
<i>T2 measurement:</i>				
Students' entrepreneurial intents	15	3.87	0.479	
Students' entrepreneurial value creation	20	3.87	0.372	
Students' self-employment ambition	15	3.85	0.981	
<i>T2-T1 measurement:</i>				
		Mean diff	SD	Level of sig.
Students' entrepreneurial intents		0.55	0.213	0.035*
Students' entrepreneurial value creation	Not applicable	0.22	1.301	0.014*
Students' self-employment ambition		0.64	0.426	0.001**

Notes: *significant at the $p < 0.05$ level, **significant at $p < 0.001$ level

Notwithstanding, there was a slightly mean different score on the value creation (0.22) outcome compare to the entrepreneurial intents (0.50) and self-employment ambition (0.64) of the students. The slightly mean differential of the value creation implies EEP result pose a weakness on the creativity, innovation, idea development and overall value creation on the student entrepreneurial capacity to business start-up dynamism. Hence, demand a crucial need to emphasise on the aforementioned area. The weakness in these core areas could truncate the entire significant impact of the EEP. As a matter of fact, today ideas determine the reality of tomorrow. Subsequently, what is the possibility of sustenance of the entrepreneurial intents and self-employment ambition by the students, when the value creation on the idea development is somewhat weak?

6. Conclusion

In sum, these empirical findings supported that EEP had a positive impact on the REM students' entrepreneurial intents, value creation and strong ambition to act entrepreneurially in the future an entrepreneur. Despite this remarkable impact, the critical issue is the constancy of the impacted value on the students over a time lag after graduation. Notwithstanding, the strength of this study is that of the longitudinal quality as demonstrated in the sequence of measurement of the entrepreneurial development of students over a period of a full semester programme. In the nutshell, this research focused on the academic effect while future research should establish the real-life effect. The principle is to separate the myths from the reality, purely, by ascertain the student's actual transfer of educational value to the real behaviour. It is if and only we establish the real-life result that we can vividly make a declaration on whether the impact of the EEP is remarkable as demand.

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References

- Ahmed, I., Nawaz, M. M., Ahmad, Z., Shaukat, M. Z., Usman, A., Rehaman, W., & Ahmed, N. (2010). Determinants of students' entrepreneurial career intentions: Evidence from Business Graduates. *European Journal of Social Sciences*, 15(2): 14-22.
- Ajzen, I. (1992). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2): 179-211.
- Ashen, M. J. & Gambo, M. J., (2012). Re-strategising the real estate profession in the Nigeria towards the attainment of vision 20:2020. *International Journal of Economic development research and Investment*, 3(2): 14-20.
- Blenker, P., Korsgaard, S., Neergaard, H., & Thrane, C. (2011). The questions we care about: Paradigms and progression in entrepreneurship education. *Industry and Higher Education*, 25(6): 417-427.
- Charney, A., & Libecap, G. D. (2001). The economic contributonal entrepreneurship education: An evaluation with an established program. *Advances in the Study of Entrepreneurship, Innovation & Economic Growth*, 12: 1-45.
- Cheng, M. Y., Chan, W. S., & Mahmood, A. (2009). The effectiveness of entrepreneurship education in Malaysia. *Education + Training*, 51(7): 555–566.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage.
- David, M. & Sutton, C. (ED) (2011). *Social Research*. London: SAGA publications.
- Fayolle, A., Gailly, B., & Lassas-Clerc, N., (2006). Assessing the impact of entrepreneurship education programmes: A new methodology. *Journal of European Industrial Training*, 30 (9): 701-720.
- Fayolle, A. (Ed.). (2007). *Handbook of research in entrepreneurship education: A general perspective*. Edward Elgar Publishing. 1.
- Fayolle, A. (2008). Entrepreneurship education at a crossroads: towards a more mature teaching field. *Journal of Enterprising Culture*, 16(04): 325-337.
- Fayolle, A., & Gailly, B. (2008). From craft to science: Teaching models and learning processes in entrepreneurship education. *Journal of European Industrial Training*, 32(7): 569–593.
- Franco, M., Haase, H., & Lautenschläger, A. (2010). Students' entrepreneurial intentions: an inter-regional comparison. *Education+ Training*, 52(4): 260-275.
- Gafar, M., Kasim, R., & Martin, D. (2013). Entrepreneurial Idea Development to Business Start-Up: Teaching Methodological Approach. *Journal of Research & Method in Education*, 1(4): 46-55.
- Galloway, L., Anderson, M. & Brown, W., (2006). Are engineers becoming more enterprising? A study of the potentials of entrepreneurship education. *International Journal of construction Engineering Education and Lifelong learning*, 16(5): 355-364.
- Gerba, D. T. (2012). The context of entrepreneurship education in Ethiopian universities. *Management Research Review*, 35(3/4): 225-244.
- Haase, H., & Lautenschläger, A. (2011). The 'teachability dilemma' of entrepreneurship. *International Entrepreneurship and Management Journal*, 7(2): 145-162.
- Henrekson, M., & Johansson, D. (2010). Gazelles as job creators: a survey and interpretation of the evidence. *Small Business Economics*, 35(2): 227-244.
- Ismail, A., Abdullahi, A. K. & Othman, A. T., (2010). Acceptance of Entrepreneurship Culture Module at the Malaysian Institutes of Higher Learning: A Gender Perspective. *Research Journal of International Studies*, 1 (15): 46-54.
- Jones, & Iredale, (2010). Enterprise education as pedagogy. *Education + Training*, 52(1): 7–19.
- Keat, O. Y., Selvarajah, C., & Meyer, D. (2011). Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students. *International Journal of Business and Social Science*, 2(4): 206-220.

- Kirby, D.A. (2004). "Entrepreneurship education: can business schools meet the challenge?", *Education and Training*, 46 (8/9): 510-519.
- Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of business venturing*, 15(5): 411-432.
- Kuratko, D. F. (2005). The emergence of entrepreneurship education: development, trends, and challenges. *Entrepreneurship Theory and Practice*, 29(5): 577-598.
- Kuratko, D. F., & Audretsch, D. B. (2009). Strategic entrepreneurship: exploring different perspectives of an emerging concept. *Entrepreneurship Theory and Practice*, 33(1): 1-17.
- Lautenschläger, A., & Haase, H. (2011). The myth of entrepreneurship education: seven arguments against teaching business creation at universities. *Journal of Entrepreneurship Education*, 14: 147-161.
- Laviolette, E. M., Brunel, O., & Marketing, M. (2011). The impact of story bound entrepreneurial role models on self-efficacy and entrepreneurial intention.
- Lüthje, C., & Franke, N. (2003). The 'making' of an entrepreneur: testing a model of entrepreneurial intent among engineering students at MIT. *R&D Management*, 33(2): 135-147.
- Matlay, H. (2006). Researching entrepreneurship and education: Part 2: what is entrepreneurship education and does it matter?. *Education+ Training*, 48(8/9): 704-718.
- Matlay, H. (2008). The impact of entrepreneurship education on entrepreneurial outcomes. *Journal of Small Business and Enterprise Development*, 15(2): 382-396.
- MOHE, (2010). Implementation plan for development of innovative human capital at tertiary level Retrieved Sept, 2012, from www.mohe.gov.my/portal/images/utama/penerbitan/MOHE
- Mueller, S. (2011). Increasing entrepreneurial intention: Effective entrepreneurship course characteristics. *International Journal of Entrepreneurship and Small Business*, 13(1): 55-74.
- Olawande, O. A., & Adebayo, A. M. (2012). Challenges facing sustainable real estate marketing and practice in emerging economy: Case study of Nigeria. *International Journal of Marketing studies*, 4(1): 58-67.
- Oosterbeek, H., van Praag, M., & Ijsselstein, A. (2010). The impact of entrepreneurship education on entrepreneurship skills and motivation. *European economic review*, 54(3): 442-454.
- Penaluna, K., Penaluna, A., & Jones, C. (2012). The context of enterprise education: Insights into current practices. *Industry and Higher Education*, 26(3): 163-175.
- Raposo, M., & Do Paço, A. (2011). Entrepreneurship education: Relationship between education and entrepreneurial activity. *Psicothema*, 23(3).
- Rideout, E. C., & Gray, D. O. (2013). Does entrepreneurship education really work? A review and methodological critique of the empirical literature on the effects of university-based entrepreneurship education. *Journal of Small Business Management*, 51(3): 329-351.
- Souitaris, V., Zerbini, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, 22(4): 566-591.
- Solomon, G. (2007). An examination of entrepreneurship education in the United States. *Journal of Small Business and Enterprise Development*, 14(2): 168-182.
- Van Der Veen, M. & Wakkee, I.A.M. (2004), *Understanding Entrepreneurship in Watkins, D. S. (Eds.) Annual Review of Progress in Entrepreneurship Research 2: 2002-2003*, Brussels: European Foundation for Management Development. pp. 114-152.
- Vesper, K. H., & Gartner, W. B. (1997). Measuring progress in entrepreneurship education. *Journal of Business venturing*, 12(5): 403-421.
- Von Graevenitz, G., Harhoff, D., & Weber, R. (2010). The effects of entrepreneurship education. *Journal of Economic Behavior & Organization*, 76(1): 90-112.
- Wilson Rangga A.J, Ahmad Ariffian B, Shamree Liew, and Abu Zarin H. (2011). The Embedment of Soft Skills in Real Estate Curriculum. *Proceedings of 2011 International Conference on Sociality and Economics Development*, Jun 17-19, Kuala Lumpur.
- Wu, S., & Wu, L. (2008). The impact of higher education on entrepreneurial intentions of university students in China. *Journal of Small Business and Enterprise Development*, 15(4): 752-774.
- Wu, L. & Li, J. (2010). Perceived value of entrepreneurship: A study of the cognitive process of entrepreneurial career decision. *Journal of Chinese Entrepreneurship*, 3(2): 134-146.

- Yasin, A. Y., Mahmood, N. A. A. & Jaafar, N. A., (2011). Students' entrepreneurial inclination at a Malaysian polytechnic: A preliminary investigation. *International Education Studies*, 4(2): 198-207.
- Yusof, M. Abdul-Samad, Z. Hassan, F. Darus, Z. Mohamed, M. and Zaharim, A. (2010). Academic entrepreneurship and innovation in higher education: An integrated framework for Malaysian universities. *Journal of Advance Educational Technologies*, 1: 263-274.