Entrepreneurship Program Evaluation in Polytechnics: Teaching Staffs' Perspectives

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Abstract. In order to survive in complex and dynamic economics challenges, involvement in the entrepreneurship program can stimulate students' entrepreneurial knowledge, experiences and skills. Therefore, teaching staffs have a vital role in stimulating and motivating the students' involvement. This paper aims to evaluate entrepreneurship programs in polytechnics from teaching staffs' perspective. 109 samples were chosen from polytechnics from six zones in Malaysia. This study uses descriptive survey method, using questionnaires .The evaluation were on the dimensions of institutional, instructional and the objectives. The findings showed that institutional dimension is at moderate high level, with highest mean obtained from the support given by administrators whilst the teaching staffs' level of knowledge obtained lowest mean score. The instructional dimension showed that teaching methods used scored highest mean, however, the availability of the facilities and infrastructures obtained the lowest mean score. Finally, the teaching staffs showed a moderately high level of satisfaction on the objective dimensions. The results indicate the need to improve on medium factors associated with the implementation of the entrepreneurship program.

Keywords: entrepreneurship; entrepreneurship program; program evaluation.

1. Introduction

Students and graduates today need to have skills and capabilities to add values to products, services and processes in order to successfully face competitiveness, both locally as well as globally. Therefore, teaching staffs have a vital role in guiding students to face global challenges. The main focus of entrepreneurship education and programs in polytechnics is to shape attitude, provide knowledge, skills, experiences and competencies of entrepreneurship to the students regardless of their background [14]; [15]. Therefore, the Transformation Plan of the Polytechnics is expected to produce graduates who have marketable skills and are enterprising by the year 2015 [2]. To realize these objectives, the Minister of Higher Education has recently officiated the Malaysian Polytechnics Entrepreneurship Center (MPEC) on the 30th October 2011. MPEC is a centre which determines the policy and the direction of entrepreneurship education development in polytechnics through transformation initiatives to enhance students' marketability and entrepreneurship. The compilation of the entrepreneurial development programs which are organized and relevant are embedded across the curricular and co-curricular in order to facilitate the achievement of its objectives [8].

2. Literature Review

Entrepreneurial activities and programs are more accurate predictor for the intention and entrepreneurial behavior than demographic factors, personality and other situational factors[16]; [4]. Entrepreneurship is measured in three ways; firstly, through students' knowledge and skills via examination. Second, evaluation of courses and teachers through survey by students. Third, by evaluating the employment status data and income status of participants after the program ends. However, there are no consensus on the issue of to the criteria used to evaluate the effectiveness of a program [19]. Many studies use various criteria such as time factor, contextual effects, financial aspects, environmental elements, personal factors, social status, role-

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model or family factor, interests, motivations and other factors [7]. In this study, the objective-based evaluation model by Robert L. Hammond is adopted.

3. Problem Statement

Although entrepreneurship education and program has been running for more than two decades, the graduates are reluctant to engage in entrepreneurship career. Only 1.9% chose to be self-employed [3]; [13]. Through the implementation of existing entrepreneurship education curriculum, 53% of the respondents stated that the content and syllabus of entrepreneurship modules in polytechnics are not comprehensive and effective, too theoretical, not multi-discipline, lack in application of the knowledge and skills, do not encourage creativity and innovativeness, do not emphasize on motivational and business management elements [5]. Lecturers lack of knowledge, some are without entrepreneurship skills, lack in experiences, training and mastery of teaching methods [18]; [11]; [1]. There exist practical gaps in the implementation of entrepreneurship education in polytechnics. It reflects imbalance in the entrepreneurship education program to produce entrepreneurs among students. Therefore, the aim of this study is to explore how far the teaching staffs evaluate the human and non- human factors of the entrepreneurship program in meeting its objectives to enhance the entrepreneurial behaviors among students.

4. Methodology

A total of 180 questionnaires were distributed to teaching staffs from six zones, namely Sarawak, Sabah, Northern, Eastern, Southern and Central region. 109 sets of questionnaires were returned by respondents, which were distributed by mail. Respondents were selected using the purposive sampling technique. This study applied descriptive survey method for program evaluation. The questionnaires consists 94-items to evaluate the dimensions of institutional, instructional and objective, using five point Likert scale, adapted from [14]. The interpretation of the mean score of each dimensions is shown in Table 1.

Mean Score	Interpretation	Indicators
1.00 - 2.00	Low	L
2.01 - 3.00	Moderately low	ML
3.01 - 4.00	Moderately high	MH
4.01 - 5.00	High	Н

Table 1: Interpretation of the Mean Score [12]

The overall Cronbach Alpha value is 0.82, and for each aspects are: administrator (0.93), family and community (0.91), instructor (0.98), content organization (0.97), teaching method (0.96), facilities and infrastructures (0.95), time organization (0.94) and objective dimension (0.94), which is above the minimum value of reliability suggested by [17].

5. Results and Discussions

Majority of the teaching staffs are females (71.6%); with parents in business (67.9%), possess degree (48.6%), teaching business studies (55%), with more than 6 years' experience (61.5%). 82.6% respondents are involved in and are managing the entrepreneurship programs but 52.3% do not have business experiences.

5.1. Institutional Dimension

The institutional dimension consists of beliefs of the teaching staffs towards the level of knowledge and skills, experiences, abilities, influences and support, from four categories of stakeholders involved in the program, namely, administrators, teaching staffs, families and communities. Table 2 shows on whole, the teaching staffs moderately agree on the role played by the stakeholders in the program. The highest mean score (3.82) is for the items of the support given by the administrators, indicating they give moderate support to teaching staffs in handling the entrepreneurship program. However, the lowest mean score (3.48) is obtained for teaching staffs' perceptions on their own level of knowledge and skills.

Table 2: Mean, Standard Deviation and the Interpretation on Institutional Dimension

No.	Items	Mean	Interpretation
1	Administrator	3.82	МН
2	Families and Community	3.77	MH
3	Teaching staffs	3.48	MH

From Table 3, most teaching staffs moderately agree that the administrators always show interest and commitment (4.01), provide opportunities and encouragement (3.87), give priority (3.83), encourage discussion on problems (3.81), always discuss about the attitude and culture of entrepreneurship (3.79), give credits (3.73) and ensure the availability of a good condition of the infrastructure (3.72).

Table 3: Evaluation on the support given by the administrators.

No.	Items	Mean
#3	Administrator shows interest and commitment in order to improve the quality of entrepreneurship program.	4.01
#6	Administrators always provide opportunities and encouragement to the lecturer to work in the planning and implementation of entrepreneurship program.	3.87
#1	Administrator give priority to the entrepreneurship program at the polytechnics.	3.83
#2	The administrator encourage lecturers to discuss problems and provide comments and suggestions to improve the quality of entrepreneurship activity.	3.81
#4	Administrators always discuss with all parties about the attitude and culture of entrepreneurship among students and lecturers.	3.79
#5	Administrators always give credits to the lecturers who contribute towards improving the quality of education and entrepreneurship program.	3.73
#7	Administrators always ensure that all facilities to implement are appropriate.	3.72

Table 4 shows the teaching staffs' view on the influences of families and communities on the students' option for entrepreneurship career and it indicates that the key person in students' lives is the most influential factor (m=3.83), followed by the local community (3.81). The lowest influential factor (3.72) is the students' immediate family towards pursuing career in entrepreneurship. This results indicates that the role played by the people around the students can help stimulate their interest and intention towards entrepreneurship career in future.

Table 4: Evaluation on the families and communities' influence on the career

No.	Items	Mean
#1	I believe that a key person in my students' lives thinks that entrepreneurship is a career choice.	3.83
#4	The local community influence my students to choose an entrepreneurship career.	3.81
#5	The polytechnic community influence my students to choose the entrepreneur ship career.	3.75
#3	I believe my students' best friend felt that they should pursue a career as an entrepreneur.	3.73
#2	Students' immediate family think they should pursue a career as an entrepreneur.	3.72

Table 5 shows the findings made on teaching staffs' entrepreneurial skills and knowledge, whereby their basic entrepreneurial skills such as technical skills, business, interpersonal, self-assessments, motivation and communication skills scored highest mean (3.62). However, the lowest mean scored is on their financial management knowledge and skills. This shows that the teaching staffs' knowledge and skills are moderate and fairly comprehensive, which may prevent the implementation of a good business practices among the students.

Table 5: Evaluation on teaching staffs' entrepreneurial skills and knowledge

No.	Items	Mean
1	Basic Skills	3.62
2	Marketing Knowledge	3.53
3	Marketing Skills	3.45
4	Financial Management Knowledge	3.39

5.2. Instructional Dimension

The instructional dimension comprises four items as indicated in Table 6. The overall teaching staffs' evaluation on the appropriateness of the content organization and teaching method scored high mean of 4.00 and 4.05, respectively. However, their evaluation on the availability of the facilities and infrastructures as well as the appropriateness of the time organization are at moderate high with the mean score of 3.55 and 3.74, respectively.

Table 6: Mean, standard deviation and the interpretation on instructional dimension

No	Items	Mean	Interpretation
1.	Content organization	4.00	Н
2.	Teaching method	4.05	Н
3.	Facilities and infrastructure	3.55	MH
4.	Time organization	3.74	MH

From Table 7, most of the facilities and infrastructures are in moderate condition, exist and are appropriate with mean obtained above 3.60, except for the computer usage and the inventory storage which are below 3.50. Entrepreneurship educational needs, environmental support, space, physical facilities and infrastructure are important to provide opportunities for students to get hands-on experience while engaging in the program.

Table 7: Evaluation towards the facilities and infrastructure

No	. Items	Mean
1	Entrepreneurial center to coordinate all activities of entrepreneurship programs exist and	3.54
	are appropriate.	
2	Electronic and printed media used are appropriate and satisfactory.	3.51
3	Equipment to carry out entrepreneurial activities are appropriate and satisfactory.	3.49
4	Strategic business location is visited.	3.39
5	Special room used to carry out the entrepreneurship activities, are appropriate and comfortable.	3.70
6	Retail space and the existing kiosks are appropriate and satisfactory.	3.62
7	Information board for notice and promotion exist and are satisfactory.	3.39
8	Computers are provided to facilitate the implementation and operation of the program.	3.70
9	Stores for inventory and products are satisfactory.	3.62

Table 8 shows the evaluation on the time organization of the programs. The duration of program operation had the lowest mean score (3.72) whilst the schedule of the program scored highest mean (3.75). This shows that the success factors for the entrepreneurship program activities are also attributable to the distribution of time

Table 8: Evaluation towards the organization of time

No.	Items	Mean
#2	Schedule programs or courses that are conducted are appropriate and adequate (number of	3.75
	days).	3.74
#1	Sessions for an entrepreneurship program carried out are appropriate and adequate (day or night).	
#3	Duration of operations is appropriate and adequate (number of hours).	3.72

5.3. Objective Dimension

The objective dimension deals with the teaching staffs' evaluation towards their satisfaction towards the implementation of entrepreneurship program. From Table 9, most of the items reflect a moderately high level of satisfaction, with the highest mean obtained for the teaching methods (3.84), which help increase the students behaviours during the execution of the program, followed by families and communities' influence in motivating the students entrepreneurship career (m= 3.83). The lowest score (3.62), is obtained by the

facilities and infrastructures in polytechnics. In order to achieve the objectives of the program, all factors below should be considered and improved upon by the stakeholders.

Table 9: Mean, Standard Deviation and the Interpretation on Objective Dimension

Items No.	Items	Mean	Interpretation
#5	Teaching method	3.84	MH
#2	Families and community	3.83	MH
#4	Content organization	3.82	MH
#1	Administrator	3.82	MH
#7	Time organization	3.80	MH
#3	Instructor	3.79	MH
#6	Facilities and infrastructures	3.62	MH

The findings in this study implies that the stakeholders of the program need to focus on human and non-human factors relating the evaluation of the program seriously. Hence, all teaching staffs may it be the lecturers or the external experts have a major commitment to improve the above evaluation criterion so that the key performance index made by the Director of Polytechnics Education Department can be a reality.

6. Conclusion

This study evaluates entrepreneurship program in polytechnics, which includes both the human dan non-human factors. Both factors are based on the teaching staffs' responses within polytechnics culture and practices. For the program to be effective, all stakeholders must pay full attention and play major role in the implementation and improvement of entrepreneurship program activities. Any aspects that are below mean score of 4.00 need corrective solutions in order to successfully achieve Polytechnics' entrepreneurship programs' mission and objectives.

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8. References

- [1] Azizee, A., Mazura, M., & Mohd Salihin, J. 2010. Keberkesanan kursus keusahawanan (P3117) di kalangan graduan politeknik Malaysia. In: *Proceedings Seminar Transformasi Pendidikan Teknikal. MyTEDT 10'*. Sungai Petani: CeTMA, UUM.
- [2] Department of Polytechnics Education. 2009. Hala tuju Transformasi Politeknik: Ke arah Kelestarian Penghasilan Modal Insan Negara. Putrajaya: Kementerian Pengajian Tinggi.
- [3] Department of Polytechnics and Community College Education. 2010. Statistik Status pekerjaan graduan warganegara IPT. Retrieved from http://www.mohe.gov.my/web statistik/fakta2010/...pdf.
- [4] Fayolle, A., Gailly, B. & Lassas-Clerc, N. 2006. Assessing the impact of entrepreneurship education programmes: A new methodolgy. *Journal of European Industrial Training*, **30**(9): 701 720.
- [5] Ida Kamalawati, A. B.2007.Entrepreneurship Education InTVET Curriculum retrieved from http://politeknik.gov.my/webjpp2/penyelidikan/paper/files/Ida%20Kamalawati_Entrepreneurship%20Education%20in%20TVET%20Curriculum.pdf
- [6] McLarty, L., Highley, H., & Alderson, S. 2010. Evaluation of enterprise education in England Research Information. England: Research reports DFE-RR015.
- [7] Mc Mullan, W., & Boberg, A. 2001. The relative effectiveness of projects in teaching entrepreneurship. *Journal of Small Business and Entrepreneurship*, **9**(9), 14-24.
- [8] Md. Nor, Y. 2011. Opening speech text: The Malaysia Polytechnics Entrepreneurship Centre (MPEC), Politeknik Sultan Salahuddin Abdul Aziz Shah, Shah Alam. 30 October 2011.
- [9] Mohamad Isa, A. 2008. The effectiveness of the implementation of entrepreneurship studies at

- Polytechnics in Malaysia. Unpublished Masters Thesis: Universitiy of Stirling.
- [10] Mohamed Khaled, N. 2011. Opening speech text: Malaysia Polytechnics Entrepreneurship Centre (MPEC), Politeknik Sultan Salahuddin Abdul Aziz Shah, Shah Alam. 30 October 2011.
- [11] Mohd Zahari, I. 2010. Developing entrepreneurship education: Empirical findings from Malaysia Polytechnics. PhD thesis, The University of Hull, UK.
- [12] Norasmah, O. 2002. Keberkesanan program keusahawanan remaja di sekolah menengah. PhD thesis, Universiti Putera Malaysia.
- [13] Norasmah, O., & Faridah, K. 2010. Entreprenuership behaviour amongst Malaysian University Students. *Pertanika: Journal of Social Sciences & Humanities*, **18**(1), 23-32.
- [14] Norasmah, O., Halimah, H., Zaidatol Akmaliah, L. P., & Noraishah, B. 2006. Entrepreneurial attitude index for teenagers in Malaysia. Final report project IRPA. No. 07-02-02-0036 EA279. 2006.
- [15] Rafidah, M. B. 2008. Penerapan kemahiran keusahawanan dalam kalangan pelajar politeknik. Universiti Tun Hussein Onn Malaysia.
- [16] Schout, H. & Harkema, S. 2010. Entrepreneurial learning: Practice as a source for learning and business success. In: *Proceedings of the 5th Eoropean Conference on Innovation & Entrepreneurship*, pp18-19.
- [17] Sekaran, U. 2007. *Research methods for business: A skill building approach.* (4th ed.,pp. 307). India: John Wiley & Sons.
- [18] Siti Noor, A., Noor Hanisa, A. H., & Salwuan, A. H. 2010. Keberkesanan proses pembelajaran modul keusahawanan dan aktiviti keusahawanan kepada niat untuk memilih kerjaya dalam bidang keusahawanan: Kajian Kes Politeknik Kota Bahru. In: *Proceedings Transformation Technical Education Seminar* (pp. 22-27). Sungai Petani: CeTMA, UUM, Jabatan Pengajian Politeknik.
- [19] Worthern, B., & Sanders, J. 1973. *Educational Evaluation: Theory and Practice*. Ohio: Wadsworth Publishing Company, Inc.