

Entrepreneurship Education in Vocational High School: Does it Really Work?

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Abstract. Entrepreneurship education aims to create knowledgeable and skilled entrepreneurs. They can create jobs and reduce unemployment. This requires entrepreneurship education with a good quality. One of the learning quality analysis techniques is by using SEEQ with 9 indicators such as learning/value, instructor enthusiasm, organization/clarity, group interaction, individual rapport, breadth of coverage, examinations grading, assignments/readings, and workload/difficulty. Although it has weaknesses, it is informative enough to know the quality of the learning process. The results of the SEEQ analysis on entrepreneurship learning in vocational high school schools get 4–5 score in average from a maximum score of 6. This means that entrepreneurship education in vocational high school schools still need to be improved.

Keywords: entrepreneurship education · SEEQ · vocational high school

1 Introduction

The general purpose of education is to create quality and competitive human resources. All these goals will be accumulated and implemented through the learning process as the spearhead of education. In addition, in the perspective of service management, educational services are classified as pure services which offer services that are carried out with the support of work tools or supporting facilities [1]. Thus, all the facilities and infrastructures provided by the university are a supporter of providing the services offered. Furthermore, Lupiyoadi [1] explains that schools in providing their services lead to the quality of learning management and personify a systemic form of service towards customer satisfaction and a high contact system. From this opinion, it can be seen that there are two important indicators of the implementation of the educational service business, namely the management of quality learning processes and customer satisfaction. In fact, students in this paradigm are placed as customers who are given the best service.

In addition, evaluation of the learning quality has been carried out continuously in many countries. There are various sources and feedback that can provide an evaluation of the learning process, such as course documentation, progression rates, curriculum design processes and teaching committees. However, the most common form of evaluation used in several countries such as the USA, UK and Australia is students' feedback. Frankly,

measuring and evaluating the quality of the learning process is not an easy task [2]. Marsh [3] states that the learning process is complex and consists of multiple dimensions, and the evaluation of the quality of learning should be able to reflect these various dimensions. According to Marsh et al. [3], the measurement of the quality of learning can be done by students, alumny, teachers or lecturers themselves, colleagues and leaders as well as independent assessment teams who do have the capability to do so. If the assessment is done by the teacher, it can reveal various aspects of learning. However, the weakness is the emergence of subjective factors and personal interests. Thus, the intervention of this subjectivity factor will affect the teacher's assessment of the quality of his own learning. Meanwhile, if assessment is conducted by colleagues and leaders, it tends to be based on visits and observations in class. This kind of assessment turns out to be less reliable. Furthermore, assessment done by independent teams seems to be the most reliable one in providing accurate information, but not all schools are able and willing to carry out this kind of assessment. Hence, one of the assessors most likely used is students. Yet, student assessments are also potentially biased. For this reason, a reliable measurement instrument is needed.

Considerable numbers of researchers have developed learning quality assessment instruments. One of the significant research results is the instrument developed by Herbert Marsh, a professor from the University of Oxford. Marsh conducted a series of studies from the 1970s to the early 21st century on a learning quality evaluation instrument called the Students' Evaluation of Educational Quality (SEEQ). SEEQ uses nine indicators, namely learning/value, instructor enthusiasm, organization/clarity, group interaction, individual rapport, breadth of coverage, examinations grading, assignments/readings, and workload/difficulty. The most important finding related to SEEQ compared to other instruments that have been developed is that this instrument is reliable, relatively valid in evaluating learning effectiveness and is generally free from potential bias due to the influence of class size and grading leniency [4].

Vocational education is secondary education oriented to the world of work that requires students to have knowledge, skills, creativity, and independence and prioritize the development of students' abilities so that they can carry out certain types of work. Besides, this school prioritizes the preparation of students to enter the world of work. In accordance with its form, it organizes educational programs that are tailored to the types of employment [5].

The Ministry of Education and Culture through the Directorate General of Secondary Education and the Directorate General of Higher Education has implemented entrepreneurship education in Vocational High Schools as a tangible manifestation of fostering a creative, innovative, sporty, and entrepreneurial spirit in educational methodology as an elaboration of creative economic development [6]. In essence, the purpose of entrepreneurship education is to provide skills in the form of basic competencies related to the independence of graduates in which they are capable to work independently.

Forming an entrepreneur is not an easy task. The fact is that learning in the classroom rather focused on entrepreneurial knowledge rather than forming entrepreneurs. According to Hansemark [7], the main purpose of entrepreneurship education is to develop the skills, knowledge and characteristics of entrepreneurs and not just to convey knowledge and information about entrepreneurship. It should be able to develop knowledge and

skills in running a business including traits such as self-confidence, ready to accept risks and innovation [8]. Furthermore, Winarno [8] explains that a number of empirical research results showed that entrepreneurship education in formal schools failed to achieve the goals of entrepreneurship education. The problem was that the graduates were not able to meet job qualifications, nor were they able to become entrepreneurs so that the numbers of unemployed graduates were increasing.

For this reason, a comprehensive assessment of the quality of entrepreneurship learning is still very open to be carried out. From the findings of previous literatures, it appears that there is still little attention paid to assessing and evaluating the quality and effectiveness of entrepreneurship education comprehensively with clear definitions and standards and generally acceptable measurements [9, 10]. In this study, the quality of entrepreneurship learning in vocational school will be analyzed using SEEQ (Student Evaluation of Educational Quality), an instrument used to obtain students' feedback about the quality and effectiveness of education [3]. Although it was initially developed more than 35 years ago by Herbert W. Marsh, this instrument is one of the most widely used and universally accepted tools for student evaluation of teaching methods [11].

2 Research Method

This research was a descriptive research which was conducted at the Vocational school no 5 Padang, West Sumatra. 180 students who were studying entrepreneurship subjects participated in this study. The research instrument used was the SEEQ which was previously translated into Indonesian language. In addition, the data analysis was done by descriptive analysis.

3 Results and Discussion

Respondents by gender are presented in Table 1.

In the Table 1, it is seen that the selected respondents were dominated by male, namely 156 students, 86.7%. Meanwhile, numbers of female respondents were 24 students or about 13.3%.

Analysis of the quality of entrepreneurship education was carried out using the SEEQ (Student Evaluation of Educational Quality) approach. It used 9 indicators and 34 questions or statements that were measured according to predetermined indicators. Besides, it used 6 scales, namely not applicable, strongly disagree, disagree, neutral, agree and

No.	Gender	Total	Percentage (%)
1	Male	156	86.
2	Female	24	13.
Total	,	180	100

Table 1. Number of respondents but Gender.

Source: results of primary data in 2022

strongly agree. Meanwhile, for the overall indicator, the answer choices were "not applicable, very poor, poor, average, good and very good". The Table 2 shows students' answers to the 9 SEEQ indicators along with their average scores and descriptions.

From the Table 2, it can be seen that the lowest score was on the breadth indicator with an average score of 4.61 and the highest score was on the group interaction indicator with an average score of 4.92. Overall, students' assessment of the quality of entrepreneurship learning got an average of 4.75 from a maximum score of 6. This illustrates that the quality of learning carried out according to student assessments was still not optimal because it was still far from the maximum score. For the detail of descriptive analysis can be seen in the Table 3.

In the learning indicators, the students gave the highest score for the meaningful aspect of the material being learned and the lowest score for the intellectually challenging aspects of learning. Furthermore, on the indicator of enthusiasm, the students gave the highest assessment that the teacher was quite energetic in learning, but the teacher's presentation was considered to be lacking and got the lowest score. Moreover, in terms of the organization indicators, the students' responses were almost the same and the highest assessment was that the teacher prepared the subject very well. In the Group interaction assessment, students gave the highest score on the opportunity given to them to discuss and ask questions.

In the individual indicator rapport, the highest score was on the teacher's ability to give individual attention to students. Meanwhile, the lowest one was on access to teachers inside and outside office hours. In addition, in the breadth indicator, the students gave the highest score on the teacher's ability in explaining the background of the concepts being

Table 2. SEEQ Results in Entrepreneurship Learning

No. Indicator Mean Description

No.	Indicator	Mean	Description
1.	Learning	4.77	Sufficient
2.	Enthusiasm	4.62	Sufficient
3.	Organization	4.85	Sufficient
4.	Group Interaction	4.92	Sufficient
5.	Individual Rapport	4.65	Sufficient
6.	Breadth	4.61	Sufficient
7.	Examinations .	4.80	Sufficient
8.	Assignments	4.71	Sufficient
9.	Overall	4.88	Sufficient
Avera	ge	4.75	Sufficient

Source: results of primary data in 2022

Sufficient

Sufficient

Sufficient

Sufficient

Sufficient

Sufficient

4,79

4,72 4,72

4.88

4.99

No	Indicators and Statements	Mean	Keterangan
	LEARNING		
1	I have found the course intellectually challenging and stimulating	4,52	Sufficient
2	I have learned something that I consider valuable	5,02	Sufficient
3	My interest in the subjects has increased as a consequence of this course	4,85	Sufficient
4	I have learned and understood the subject materials of this course.	4,72	Sufficient
	ENTHUSIASM	-	
1	Instructor was enthusiastic about teaching course	4,73	Sufficient
2	Instructor was dynamic and energetic in conducting the course	4,67	Sufficient
3	Instructor enhanced presentations with the use of humour	4,56	Sufficient
4	Instructor's style of presentation held my interests during class	4,54	Sufficient
	ORGANIZATION		
2	Instructor's explanation were clear	4,92	Sufficient
2	Course materials were well prepared and carefully explained	4,96	Sufficient
3	Proposes objectives agreed with those actually taught so I knew where the course was	4,84	Sufficient
	going		
4	Instructor gave lecturers that facilitated taking notes	4,69	Sufficient
	GROUP INTERACTION		
1 2 3	Students were encouraged to participate in class discussion	4,81	Sufficient
2	Students were invited to share their ideas and knowledge	4,97	Sufficient
	Students were encouraged to ask questions and were given meaningful answers	4,97	Sufficient
4	Students were encouraged to express their own ideas and/or question to the instructor	4,93	Sufficient
	INDIVIDUAL RAPPORT		
1	Instructor was friendly towards individual students	4,67	Sufficient
2	Instructor made students feel welcome in seeking help/advice in or outside of class	4,66	Sufficient
3	Instructor had genuine interest in individual students	4,73	Sufficient
4	Instructor was a dequately accessible to students during office hour or after office hour	4,56	Sufficient
	BREADTH		
1	Instructor contrasted the implication of various theories	4,33	Sufficient
2	Instructor presented the background or origin of ideas/concept developed in class	4,77	Sufficient
1 2 3	Instructor presented points of view other than his/her own when appropriate	4,59	Sufficient
4	Instructor a dequately discussed current development in the field.	4,77	Sufficient
	EXAMINATIONS		
1	Feedback on examinations/graded was valuable	4,79	Sufficient
2	Methods of evaluating students workd were fair and appropriate	4,83	Sufficient

ASSIGNMENT

OVERALL

Required readings/texts were valuable

As an overall rating. I would say the instructor is

Examinations/gradedmaterials tested course content as emphasized by instructor

Reading, homework, laboratories contributed to appreciation and understanding of

Compared with other courses I have had at the U of S, I would say this course is

Compared with other instructors I have had at the U of S, I would say the instructor is

Table 3. Descriptive Anlaysis of Entrepreneurship Learning by using SEEQ

studied and the latest developments of what was learned. However, they gave the lowest score on the aspect of contrasted the implication of various theories which was also the lowest one among all the items in SEEQ. Moreover, in the examination indicators, student assessments were almost the same for all items and they stated that the assessments given were quite fair. It was also supported by the assignment indicator in which students stated that the tasks given contributed greatly to increasing their understanding of the teaching material. In general, students considered that entrepreneurship learning was good with an average score of 4.79 out of 6 on a maximum scale.

The last question item on the overall indicator was Yes/No question; thus, the answer choices would be yes or no. The Table 4 shows students' response to the statement whether the teacher would be rewarded a teaching award or not. The result revealed that 74.4% of students stated that their teacher deserved to be given an award while the remaining 25.6% said they did not.

Indicator (Overall)AnswerNumber of StudentsPercentage (%)33. Should this instructor be nominated for an outstanding teaching award?Yes13474.4No4625.6Total180100

Table 4. Yes/No Answers of Overall Indicator

Source: results of primary data in 2022

Table 5. Number of students' comments/feedback

Comments/Feedback	Answer	Number of students	Percentage (%)
34. Please provide any additional	Giving comments	27	15
comments or feedback	No Comments	153	85
Total		180	100

Source: results of primary data in 2022

The last part of SEEQ, students were asked to give comments about learning. The results showed that only 15% of students left comments on the space provided while 85% did not give any comments (Table 5).

From the last item of SEEQ instrument, the comments left by 15% of students did not provide varied information. The comments were relatively short and did not provide a long description of various aspects. This may also be related to the lack of students' ability to provide critical and analytical opinions. Besides, students' comments only stated that they were happy when learning, and pleased with the teacher. They were fully aware that they needed more practice. From all the comments, only one student stated that entrepreneurship learning motivated him to become an entrepreneur. However, the rest did not provide clear information about it. The recapitulation of students' comments can be seen in Table 6.

Assessment of the quality of learning has become one of the important matters, especially in schools. In accordance with the statement of Corbalan [12] who states that "currently, there remains a high degree of concern about the improvement of teaching quality at the higher education level. In particular, the improvement of teaching quality is one of the primary matters that must be addressed continuously by universities." Furthermore, Plaza and Medrano [12] elucidate that "continuous improvement is not a tool or a technique but rather a way of life." Both of these views imply that improving the quality of learning that must be carried out on an ongoing basis is important. Improving the quality of learning on an ongoing basis is not just a routine task but rather a culture that is embedded and attached to educational institutions. This kind of assessment will provide quality assurance for students and graduates.

Overall, students' assessments of entrepreneurship education get a sufficient score with an average score of 4 out of 6 on a maximum scale. This means that the quality of entrepreneurship learning still needs to be improved. The weakness of this assessment

Table 6. Recapitulation of Students' Comments on Entrepreneurship Learning

No.	Comments/Feedback		
1	I am very excited in learning this subject.		
2	The implementation of entrepreneurship learning must go well because this subject is very important for the future if you want to start your own business.		
3	Entrepreneurship learning is monotonous.		
4	It is necessary to increase the creativity of teachers and students and increase work practice.		
5	The learning process is fun. It also opens our minds how we will face our future.		
6	This learning is very good, and the teacher also delivers the materials very kindly.		
7	It needs a wider learning development.		
8	The implementation of entrepreneurship learning is very helpful, especially for students who want to be entrepreneur.		
9	The implementation of entrepreneurship learning is very good and well prepared, and the problem that needs to be addressed is lack of practice.		
10	The lessons motivate us to run a business.		
11	Give us more practices than the material.		
12	The teacher is very friendly and kind.		
13	The lesson is good because we can learn the business world.		
14	I am excited learning this lesson.		

Source: results of primary data in 2022

is that it is still assessing the entrepreneurship education process and has not clearly explored the outcome aspects. Entrepreneurship learning certainly has unique characteristics because it is not only concerned with knowledge and mastery of skills but the outcome where this learning is able to produce strong, knowledgeable entrepreneurs who can continue to create more jobs. This kind of impact evaluation is still very open for analysis. It is relevant to what Timmons' says about formal education in which formal education is not able to encourage the entrepreneurial spirit in its graduates due to the fact that the schools still provide minimal knowledge and preparation about business and works [13]. Furthermore, the entrepreneurship education has not been able to be a solution to reduce unemployment, and new entrepreneurship learning equips students with not sufficient skills for entrepreneurship [14]. Moreover, students' comments that are still limited may be in line with this opinion in which the students learn entrepreneurship to gain knowledge and score, yet it has not formed a strong mindset that entrepreneurship learning is given to make them capable entrepreneurs.

4 Conclusion

Student assessment using SEEQ on the quality of entrepreneurship education provides sufficient score. The average score range is 4–5 from a maximum score of 6. This indicates the quality of entrepreneurship learning needs to be improved especially in the breadth and enthusiasm aspects. It also implies that the students need more practical activities that can increase their skills for entrepreneurship. Briefly, the ultimate effectiveness of entrepreneurship learning can certainly be seen from how many students decide to become entrepreneurs. However, this analysis has not reached that aspect. Future research to prove this is still very open to be conducted.

References

- Lupiyoadi, Rambat dan A. Hamdani. 2008. Manajemen Pemasaran Jasa. Jakarta: Salemba Empat.
- 2. Keane, E Elaine & Iain Mac Labhrainn. (2005). *Obtaining Student Feedback on Teaching & Course Quality*. Briefing Paper, 2. Dari Centre for Excellence in Learning & Teaching
- 3. Marsh, Herbert W & Lawrence A Roche. 1997. *Making Students' Evaluation of Teaching Effective, The Critical Issues of Validity, Bias and Utility*. Journal of American Psychologist, Vol 52, No 11, 1187-1197.
- Addison, W. E., & Stowell, J. R. (2012). Conducting Research on Student Evaluations of Teaching. In M. E. Kite (Ed.), Effective evaluation of teaching: A guide for faculty and administrators. Diakses dari Society for the Teaching of Psychology web site: http://teachpsych.org/ebooks/evals2012/index.php
- 5. Government Regulation No. 29 of 1990
- 6. Presidential Decree No. 2009 about Development of Creative Economic
- Hansemark, O.C. (1998), "The Effects Of An Entrepreneurship Programme On Need Forachievement And Locus Of Control Of Reinforcement", *International Journal of Entrepreneurship Behaviour and Research* 4(1), 28-50.
- 8. Winarno, A. (2016). Entrepreneurship Education in Vocational Schools: Characteristics of Teachers, Sc hools and Risk Implementation of the Curriculum 2013 in Indonesia. *Journal of Education and Practice*, 7(9), 122-127.
- Alberti, F. Sciascia. S, Poli. A. (2004) Entrepreneurship Education: Notes on An Ongoing Debates. 14th Annual IntEat Conference. Italy: University of Napoli Federico II.
- 10. Ghina, A. (2014). Effectiveness of entrepreneurship education in higher education institutions. *Procedia-Social and Behavioral Sciences*, 115, 332-345.
- 11. Grammatikkopoulos, V., Linardakis, M., Education, A. G.-H., & 2015, undefined. (2015). Assessing thr Students' Evaluations of Education Quality (SEEQ) questionnaire in Greak higher education. Springer, 70(3), 395–408.
- 12. Corbalan, Montserrat, et. al. (2013). *Reduction of the Students' Evaluation of Education Quality Questionnaire*. Proceedings of the 2013 Federated Conference on Computer Science and Information Systems pp. 695–701.
- 13. Timmons, J. & Spinelli, S. (2004), "New Venture Creation: Entrepreneurship for the 21 th Century (6 edition)", Burr Ridge: Irwin.
- 14. Fosu, Richard & Effah, B.R. (2013), "The Scottish University Level Entrepreneurship Education Initiative: Lessons for Ghana in Dealing with Graduate Unemployment", *Journal of education and practice*, IISTE 4 (24).

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