



## KOLB'S EXPERIENTIAL LEARNING AS AN EFFECTIVE LEARNING MODEL IN CREATIVE PRODUCT AND ENTREPRENEURSHIP SUBJECTS

Stephanus Fajar Pamungkas<sup>1</sup>, Indah Widiastuti<sup>2</sup>, Suharno<sup>3</sup>

<sup>1,2,3</sup>Mechanical Engineering Education, Universitas Sebelas Maret Surakarta

Email: [stephanusfajarp014@student.uns.ac.id](mailto:stephanusfajarp014@student.uns.ac.id)

### KEYWORDS

Creative products  
Entrepreneurship  
Experiential learning  
Learning outcome  
Vocational

### ABSTRACT

Student learning outcomes are influenced by the ability of students to understand and the ability of teachers to deliver subject matter. In the delivery of subject matter, appropriate and effective learning models are needed to improve student understanding. This article presents an effective learning model for Creative Products and Entrepreneurship subjects in Vocational School. The aim of this subject is to form students to have the character, skills, and understanding as an entrepreneur, and to be able to bring up quality young entrepreneurs. To achieve the learning goal, learning activities must involve students directly. The experiential learning model emphasizes the role of active student experience and involvement. Through practice-based learning experiences, students feel more confident in handling jobs in real work. Learning through this model is able to facilitate students in learning so that it could improve student learning outcomes. Therefore, experiential learning is one alternative solution in the Creative Products and Entrepreneurship learning process. The research method used is a review literature by analyzing various relevant sources related to the importance of experiential learning and the challenges of its implementation. Creative Products and Entrepreneurship learning in Vocational Schools is implemented in various forms of production and business-based learning which is a real practice. Through experiential learning, it is expected that entrepreneurial learning objectives could be achieved and young entrepreneurs from Vocational Schools could increase significantly. This is in accordance with the concept of work, continuing study, and entrepreneurship for vocational high school graduates. In addition, it also supports the Entrepreneurial School program as an effort of the government to achieve the vocational high school revitalization target, while at the same time reducing the unemployment rate of vocational high school graduates.

### INTRODUCTION

The attention of the Indonesian government towards the quality of education of Vocational Schools is increasingly visible. Government through Presidential Instruction Number 9 of 2016 calls for Revitalization of Vocational Schools in order to improve the quality and competitiveness of Indonesian human resources. The current ratio of the number of vocational schools and senior high school has reached 51%: 49% (Basic Data Education, 2018). To improve the quality of human resources, vocational school graduates are expected to have special skills so that the absorption of labor continues to increase. The increasing number of vocational school graduates is expected to reduce unemployment in Indonesia. However, the Central Statistics Agency data stated that as of August 2018, the open unemployment rate was 5.34% or around 6.99 million people. Based on the education level, the open unemployment rate is still dominated by vocational school graduates compared to other levels of education, 11.24% or around 785.676 thousand people. The data showed things that contradict with the spirit of the development of Vocational Schools, meaning there is a supply of labor that is not absorbed at the vocational school level. This has become a serious concern for the stakeholders of vocational education to improve themselves to integrate the vocational education curriculum with the world of work or industry.

The vocational curriculum used today is the 2013 revised curriculum in 2017. The 2013 curriculum is oriented towards the potential to inculcate character values. Decree of General Directorate Primary and Secondary Education

Number 130 / D / KEP / KR / 2017 establishes changes to the structure of the vocational school curriculum by redesigning the subjects of Craft and Entrepreneurship into Creative Products and Entrepreneurship, then incorporating them into vocational productive subjects. Subject hours change from 2 hours to 5 hours of study. Not yet implemented, the structure of the vocational school curriculum has changed again through Decree of General Directorate Primary and Secondary Education Number 07 / D.D5 / KK / 2018, namely in the number of Creative Products and Entrepreneurship lesson hours which were originally 5 hours into 7 hours of lessons in grade XI and 8 hours in grade XII. This showed that entrepreneurship learning in vocational schools is very important. Entrepreneurship competencies for vocational students must be given so that students have an entrepreneurial spirit with armed thinking skills and skills learned in vocational subjects. Creative Products and Entrepreneurship learning could be a starting point for a revolutionary entrepreneurial learning revolution with vocational skills. Changes in the structure of the curriculum especially for Creative Products and Entrepreneurship subjects also have an impact on vocational teachers, because these subjects could only be taught by entrepreneurial teachers and vocational teachers.

Entrepreneurship competencies of vocational students are influenced by the ability of students to understand these subjects. Increased understanding of students in Creative Products and Entrepreneurship subjects could also improve learning outcomes, achievements, and skills possessed by students. Increased cognitive and psychomotor understanding of students is influenced by learning situations. Teachers are required to be able to create supportive learning situations, so effective learning methods and models are needed. The 2013 curriculum allows teachers as facilitators of learning to manage to learn both in the classroom and outside the classroom. Therefore, teachers are required to make innovations as a whole, especially on methods, approaches, and learning models with the aim of attracting students' interest in participating in entrepreneurship learning.

The characteristics of vocational learning are to provide a significant proportion of practical activities compared to theoretical learning (Decree of General Directorate Primary and Secondary Education No. 07 / D.D5 / KK / 2018). Experiential learning is a model that activates the learning process to build cognitive and psychomotor abilities through a direct learning experience. The learning experience is a key factor in gaining knowledge through things that are experienced and practiced while being able to connect knowledge with problems that exist in the real world (Efstratia, 2014). Naufalin, et al. (2016) stated that the experiential learning model is able to improve students' soft skills. Students' soft skills are formed through continuous stimulus when they are involved in learning activities. Astutik (2008) stated that student learning activities increase through experiential learning in entrepreneurial learning in general. Therefore, there is an opportunity to apply the experiential learning model to the learning of Creative Products and Entrepreneurship where learning is adapted to the skills program or expertise competencies learned. In addition, the implementation of experiential learning models could help students to actively participate in entrepreneurial learning so that students' understanding and skills increase and are in accordance with their vocational competencies.

## **RESEARCH METHODS**

The research method used is a systematic method of a literature review of Okoli & Schabram (2010) by analyzing various relevant data sources related to experiential learning and Creative Products and Entrepreneurship learning. The steps in the systematic literature review method are as follows:

### **1. Planning**

The first step of this article is to identify the purpose of the review. The purpose of this review is to find out how the impact of the application of experiential learning on student learning outcomes.

### **2. Selection**

The researcher conducted an article selection process from several different article databases. The keywords used are 'experiential learning', 'entrepreneurship', and 'learning outcomes'. The article used considers the suitability of the theme and the objectives that have been determined. Then the articles that have been obtained are sorted and selected according to the theme and purpose of the review.

### **3. Extraction**

The screening process is a step to explore information from articles that have gone through the selection process by making a research matrix. This research matrix contains information related to the title of the article, the author of the article, the theme of the research, keywords, and conclusions from the results of the study. Selected articles were then selected based on the quality of the articles and the research methods used related to the experiential learning model, entrepreneurial learning, the application of experiential learning in learning, as well as challenges in its application.

### **4. Execution**

The final step is the process of combining data and facts found when making a research matrix. Then, it is written in the form of an article and analyzed according to the intended purpose.

## RESULTS AND DISCUSSION

### **Experiential learning**

Experiential learning is defined as "the process by which knowledge is created through the transformation of experience. The results of knowledge from a combination of grasping and changing experiences" (Kolb, 1984).

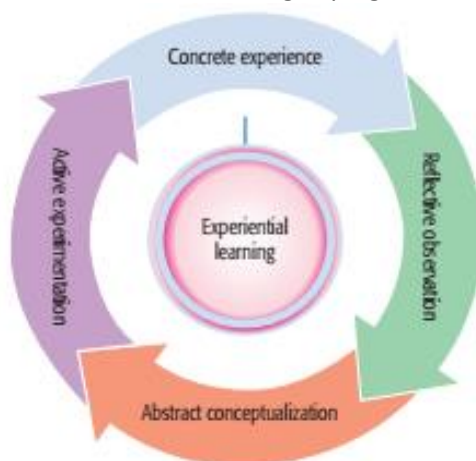


Figure 1. Experiential learning cycle  
(Hajshirmohammadi, 2017)

The learning procedure in experiential learning is divided into 4 stages, namely:

1. Stage of concrete experience (concrete experience)  
As the beginning of learning, concrete experience stages emphasize students individually to think openly and be able to adapt to a systematic approach to problem situations.
2. Reflective observation stages  
At this stage, students observe a simple demonstration by displaying virtual visualization and trying to express or express opinions why and how this can happen.
3. Abstract conception stage  
The abstract conception stage emphasizes students to understand concepts in general, referring to the stages of concrete experience and reflective observation. This abstract conception requires students to use logical thinking to understand problems.
4. Active experimental stage  
After that, the active test phase is complete. This means that students can use the theories they get during the abstract concept stage to make predictions.

Baharuddin & Wahyuni (2007) explain that the purpose of experiential learning methods is to influence students by (1) changing cognitive structures, (2) changing student attitudes, and (3) expanding existing skills. This learning model provides a direct learning experience to students so that they can enable students to build knowledge, skills, score, and attitudes through their experiences. Students are subjects of learning who must be actively involved in the process of learning activities (student-centered learning). In addition, the direct experience experienced by students provides deep knowledge and makes it easier for students to apply it in real life. Through learning methods based on this experience, students could build concepts that are meaningful and full of confidence in solving problems and making the right decisions through direct learning.

### **Entrepreneurship Learning**

Entrepreneurship is defined as creative and innovative abilities that are used as a basis for finding opportunities for success. The essence of entrepreneurship learning is the ability to create new and different innovations through creative thinking and innovative actions to create opportunities. Creative and innovative processes begin with the emergence of new ideas, ideas, and thoughts to create something unique. Something unique is the added value that becomes the source of excellence becomes an opportunity (Suryana, 2003).

Heinonen and Poikkijoki (2006) argue that the main challenge of entrepreneurship learning is how to facilitate learning activities to support the process towards these entrepreneurs. The important thing an entrepreneur must have (Ciputra, 2009) is:

1. Opportunities create, which creates opportunities, not just looking for opportunities.
2. Innovation, which makes a unique product innovation.
3. Calculating risk-taking, which has the courage in taking measurable risks

### **Experiential Learning Implementation**

Zan, et al. (2015) stated that learning comes from experience. The learning experience is a key factor in gaining knowledge through things that are experienced and practiced while being able to connect knowledge with problems that exist in the real world (Efstratia, 2014). Spanjaard, et al. (2018) stated that through practice-based authentic learning experience (experiential learning) could improve student self-efficacy which makes students feel more confident to handle jobs in the real world of work. Kolb's experiential learning model could stimulate students to choose to learn so that they feel challenged to build abilities in effective thinking and problem solving (Manolas, 2005).

Wurdinger & Rudolph (2009) states that the experiential learning approach will help inspire and motivate students to learn, make learning more interesting and educated students. This experiential learning approach can be done with some innovative teaching through active learning, project-based learning, service learning, problem-based learning, and place-based education. Active involvement of students in the experiential learning process has a positive and sustained impact on students' emotions, specifically the level of optimism (Shemali, 2013), and increasing students' critical thinking skills (Sholihah et al., 2016).

Naufalin LR, et al. (2016) conducted a study on the application of experiential learning models on entrepreneurial learning to improve students' soft skills. The results showed that the experiential learning model was able to improve students' soft skills. experiential learning increases self-confidence by 52.1%, results-oriented by 22.9%, takes risks 10.4%, leadership at 12.5%, originality 10.4%, and future orientation at 18.8%. Students' soft skills are formed through continuous stimulus when they are involved in learning activities. In addition, this method is effective because it trains students to learn entrepreneurship by experiencing it themselves so that the objectives of craft subjects and entrepreneurship can be achieved. Not only that, students can get new experiences from what they have seen, that they have heard, that they have felt and done.

The implementation of experiential learning in learning activities is not easy. According to Nooghabi, Iravani, & Fami (2011), there are four components which are the main challenges in applying the experiential learning model in learning, namely (1) inadequate education and equipment space; (2) lack of experience of teachers and instructors; (3) not paying attention to additional experiences that are in accordance with their competence; (4) poor class management. Experiential learning theory is broad in scope and cannot be easily understood, so it is necessary to think about designing learning experience activities that must occur in students both individually and in groups. Learning activities must focus on students (student-oriented). So, what should the teacher do, what should the students do, what the teacher must say in detail must be well designed.

Audet (2004) states that entrepreneurship is not easy to teach. This is because the impact of entrepreneurial learning on the interest in entrepreneurship as a career choice cannot be measured only through short-term perceptions but in a long and volatile period. Career interest could be formed through impressive direct experience and that provides opportunities for students to practice, obtain feedback and develop skills that lead to self-efficacy and hope for satisfying learning outcomes (Farzier & Niehm, 2008). However, it must be understood that experiential learning is one of the innovations in meeting current educational needs (Warnick, Joshua & Anton, 2014).

Astutik (2008) argues that the supporting factors in entrepreneurship learning are the presentation of clearer and more detailed subject matter in accordance with the learning objectives to be achieved, active student participation in learning, and interesting and fun learning situations. While the inhibiting factors for the implementation of experiential learning are less effective and efficient time, students have difficulty adapting to the experiential learning model, the ability of students who lack understanding of what to do, and low self-confidence of students. The results revealed that overall student learning activities increased 16.5%; Learning outcomes of cognitive aspects (knowledge) increased by 12.56%, while those on affective aspects were 12.64%, and psychomotor outcomes (skills) increased by 5.92%.

Experiential learning methods are the right method to be applied to entrepreneurial learning. Experiential learning is able to bridge conceptual knowledge with skills adapted to the world of work in real terms so that residual output is expected to be more skilled and competitive. Experiential learning provides benefits including more

students can learn (Bangs, 2011), independent learning is increasing (Jiusto & Dibiaso, 2006), learning readiness increases, and 75% of knowledge learned through experiential learning can be mastered, while only 5% of conventional learning which can be mastered (Fulford, 2013).

Through the experiential learning model in learning Creative Products and Entrepreneurship students are expected to be more motivated and more active in learning so that learning outcomes and skills can increase significantly. In addition, the application of experiential learning in Creative Products and Entrepreneurship learning is expected to be able to equip students cognitively and psychomotor through experience, so that students have the competitiveness to be able to work, continue their studies or become entrepreneurs.

Through experiential learning in Creative Products and Entrepreneurship learning it is expected that young entrepreneurs from vocational graduates can increase significantly so as to support the Entrepreneurial School program as one of the efforts to achieve the Vocational School Revitalization target.

## CONCLUSION

Student learning outcomes are influenced by the ability of students to understand the subject matter so that effective learning methods and models are needed. Based on several studies stated that experiential learning is able to improve student achievement, attitudes, knowledge, and skills through direct experience. The Creative Product and Entrepreneurship subjects aim to form students to have the character, skills, and understanding as an entrepreneur, and to be able to bring up quality young entrepreneurs. Creative Products and Entrepreneurship learning support the Entrepreneurial School program as an effort by the government to attain the target of Vocational Revitalization. Thus, experiential learning is an alternative solution in the Creative Products and Entrepreneurship learning process. The experiential learning model emphasizes the role of active student experience and involvement. Through practice-based authentic learning experiences, students feel more confident in handling jobs in the real world of work. The implementation of Kolb's experiential learning could improve understanding of concepts, so students can build their knowledge and skills through their experiences directly. Learning through this model could improve student learning outcomes and students are able to develop their skills. The implementation of this learning model is able to facilitate students in learning so that learning outcomes and student experience could increase significantly. Through experiential learning in Creative Products and Entrepreneurship learning, it is expected that entrepreneurial learning objectives can be achieved and young entrepreneurs from Vocational Schools can increase significantly. This is in accordance with the concept of working, continuing studies and entrepreneurship for vocational graduates so that the unemployment rate of vocational school graduates can be reduced.

## REFERENCES

- Astutik, Harini Yuni. (2008). *Penerapan Experiential learning pada Mata Diklat Kewirausahaan untuk Meningkatkan Hasil Belajar Siswa*. Universitas Negeri Malang.
- Baharuddin, Wahyuni Nur Wahyuni. (2010). *Teori Belajar & Pembelajaran*. Yogyakarta: Ar-Ruzz Media.
- Bangs, J., (2011). "Experiential learning In An Organizational Leadership Program," *Journal of College Teaching & Learning*, Vol. 8, (10), pp. 29-34.
- Ciputra. (2009). "Solusi Job Creation di Tengah Krisis Global". SK. Indopos Sabtu, 21 Februari 2009, Surat Kabar, harian, Jakarta.
- Efstratia, D. (2014). Experiential Education through Project Based Learning. *Procedia - Social and Behavioral Sciences*, 152, 1256–1260. <https://doi.org/10.1016/j.sbspro.2014.09.362>
- Fulford, M., (2013). "Practice What You Preach: using an *Experiential learning* Approach to Teach". *Journal of Leadership, Accountability, and Ethics*, Vol. 10 (2), pp. 81-86.
- Hajshirmohammadi, Atousa. (2017). *Incorporating Experiential learning in Engineering Courses*. IEEE Communication Magazine.
- Heinonen, J., & Poikkijoki S.A. (2006). "An entrepreneurial-directed approach to entrepreneurship education: mission impossible?". *Journal of Management Development*. Vol. 25 Issue 1, pp. 80-94, <https://doi.org/10.1108/02621710610637981>.
- Jiusto, S. & DiBiasio, D. (2006). "Experiential learning Environments: Do They Prepare Our Students to be Self-Directed, Life-Long Learners?," *Journal of Engineering Education*, Vol. 95 (3), pp. 195-204.
- Kolb. (1984). *Experiential learning: Experience as the Source of Learning and Development* [Paperback], (January 1984), 288. Retrieved from <http://www.amazon.co.uk/Experiential-Learning-Experience-Source>
- Manolas, E.I. (2005). "Kolb's *Experiential learning* Model: Enlivening Physics Courses inPrimary Education". *The Internet TESL Journal*. 3 (9).

- Naufalin, LR., Dinanti A., Krisnaresanti A. (2016). *Experiential learning* Model on Entrepreneurship Subject to Improve Students' Soft Skills. *Dinamika Pendidikan* 11 (1) pp. 65-73. Doi: 10.15294/dp.v11i1.8703.
- Nooghabi, SN., Irvani H., Fami HS. (2011). A study on present challenges on *experiential learning* of university students (The University of Tehran, The Colleges of Agriculture and Natural Resources, Iran). *Procedia Social and Behavioral Science* (15) pp. 3522-3530.
- Okoli, C., Schabram, K. (2010). A Guide to Conducting a Systematic Literature Review of Information Systems Research. *Sprouts: Working Papers on Information Systems*, 10(26). <http://sprouts.aisnet.org/10-26>.
- Peraturan Direktorat Jendral Pendidikan Dasar dan Menengah Nomor 07/D.D5/KK/2018
- Spanjaard, D., Hall, T., & Stegemann, N. (2018). *Experiential learning*: Helping students to become 'career-ready.' *Australasian Marketing Journal*, 26(2), 163–171. .
- Shemali, NB., (2013). Correlation between *Experiential learning* and Optimism among College students. *Dissertation in The British University in Dubai*.
- Sholihah, M., Utaya S., Susilo S. (2016). Pengaruh Model *Experiential learning* terhadap Kemampuan Berpikir Siswa Sma. *Jurnal Pendidikan* Vol. 1 (11), hal. 2096-2100.
- Surat Keputusan Direktorat Jendral Pendidikan Dasar dan Menengah Nomor 130/D/KEP/KR/2017.
- Suryana. (2003). *Kewirausahaan: Pedoman Praktis, Kiat dan Proses Menuju Sukses*. Jakarta: Salemba Empat.
- Warnick, G. M. (2014). An *Experiential learning* Approach to Develop Leadership Competencies in Engineering and Technology Students An *Experiential learning* Approach to Develop Leadership. *American Society for Engineering Education*.
- Wurdinger, S., Rudolph J. (2009). Teaching Practices that Improve Student Learning: Five Experiential Approaches. *Journal of Teaching And Learning*, Vol. 6 (1).
- Zan, G. D., Toni, A. F. D., Fornasier, A., dan Battistella, C. (2015). A Methodology for the Assessment of *Experiential learning* Lean: The Lean Experience Factory Case Study. *European Journal of Training and Development*, 39 (4), 332- 354.