

# The Effect of Constructivistic Learning Models on Entrepreneurial Orientation

Anggraeni Purwatiningsih<sup>1</sup>, Kamaludin<sup>2</sup>, Pudjo Sugito<sup>3</sup>

<sup>1</sup>Department of Accountancy, Faculty of Economics & Business, University of Merdeka Malang, Indonesia  
email: anggraeni@unmer.ac.id

<sup>2</sup>Department of Management, Faculty of Economics & Business, University of Merdeka Malang, Indonesia  
email: kamaludin@unmer.ac.id

<sup>3</sup>Department of Management, Faculty of Economics & Business, University of Merdeka Malang, Indonesia  
email: pudjo.sugito@unmer.ac.id

**Abstract**— This research activity was carried out to analyze the influence of constructivist learning models on entrepreneurial orientation. The research population is all Vocational High School students in Malang with proportional random sampling sampling technique and a total sample of 100 students. Primary data was analyzed by structural equation model with Partial Least Square (PLS) data processing program. Based on the results of data analysis revealed that the constructivistic learning model influences the entrepreneurial orientation. It means, the constructivistic learning model really becomes an approach in building mental entrepreneurship.

**Keywords**— Constructivistic, Entrepreneurship, Learning Model.

## I. INTRODUCTION

Recently, Indonesia only has 1.56 percent of the total number of entrepreneurs. United States around 12 percent, Japan 10 percent, Singapore 7 percent (World Bank Annual Report, 2017). This fact is an indication that the country is still far behind other countries, including even neighboring Singapore. Of course, this fact also has an impact on various bad predicates directed at this country and nation, for example the poor, disadvantaged nations and other bad nations.

In the dynamics of changes in macro factors lately, actually the opportunity for entrepreneurship may find its best momentum. That is because every change is sure to bring a variety of business opportunities. But of course it must go through various innovations that lead to the production of quality products and services, which are indeed the needs of all markets. According to Joseph A. Schumpeter (1883-1950), it was argued that the fast-changing era is the best momentum to do various efforts, especially those that are innovative. When everything is difficult, it requires a spirit to break the deadlock of the system order through innovative and creative ways (creative destruction). But of course, it takes reliable entrepreneurial skills. Unfortunately, the development of

education in this country is still less able to produce graduates who are entrepreneurial.

Meanwhile, the central and regional governments through the education office as the leading sector are too focused on developing vocational education, whose graduates are only ready to work for others. In fact, thousands of Vocational Schools (Vocational High Schools) were established in this country. The implication is that the policy does not help to reduce the unemployment rate, because the graduates are very dependent on the availability of employment opportunities. For this reason, the phenomenon of the problem must be immediately addressed with an educational model that encourages students to be able to become entrepreneurs. Based on a research result, it was revealed that this could only be done through constructivist learning models (Zebua, E.; Masidin, S. & Jama, J., (2015).

Based on data from the Education Office of Malang City, Malang Regency and Batu City in 2017, the number of vocational schools both state and private in Malang City there were 62 vocational units, in Malang District 76 units and Batu City 10 units. While the number of active students is 11,505 students. A relatively large number of young people, when equipped with entrepreneurship, will be an extraordinary regional asset. In fact, it will also reduce the burdens of local governments related to providing employment opportunities. That is, because vocational schools graduates will become productive human resources and do not depend anymore on job openings, which have become increasingly difficult lately.

Then, from the results of the preliminary study revealed, almost 95% of vocational schools graduates work for other people and only 5% work independently. Interestingly, the average number of independent workers in each vocational school graduate ranges from 1-3 people, including business owners. Of course, from the aspect of employment, it can be considered relatively

good, amid the difficulty of getting employment opportunities.

However, these young entrepreneurs are faced with many problems. Its growth is relatively slow as a result of its management is far from efficient and the quality is not changing rapidly. The meaning, they work far from the touch of modern management. Coupled with the growing number of relatively similar businesses that are large-scale offering more attractive products and services. Of course this reality is a serious threat that can interfere with its continuity, including its contribution to the aspect of employment to the possibility of increasing poverty rates as a result of the existence of these businesses that have the potential to go bankrupt.

For this reason, building and printing young entrepreneurs who have a high spirit as an urgent need for vocational students in Malang Raya. But it must be remembered, the increase in market opportunities will surely be followed by an increasing competition climate in the market. So, the effort that must be done is to develop a constructivist learning model that empirically can build entrepreneurial intentions, which can then encourage vocational school graduates to become a generation of new entrepreneurs who are more spirited and promising.

The purpose of implementing this applied product research activity is to build entrepreneurial intentions through constructivist learning models for students of vocational schools throughout Malang. It is expected that with the development and implementation of the learning model, it will be an intervention tool for school management, to print skilled workers while giving birth to new entrepreneurs in the Greater Malang area. In detail, the specific objectives of this study are to analyze the interrelationship between constructivist learning models and entrepreneurial intentions.

Hisrich, Peters, and Sheperd (2008) interpret entrepreneurship as the process of creating something new in value, using the time and effort needed, taking the financial, physical, and social risks that accompany it, receiving the monetary rewards generated, as well as personal satisfaction and freedom. Entrepreneurship can also be defined as risk taking to run your own business by utilizing opportunities to create new businesses or with an innovative approach so that the managed businesses develop into large and independent in facing competition challenges.

Entrepreneurs are different from managers. Even so, the tasks and roles can complement each other. An entrepreneur who opens a company must use managerial skills (managerial skills) to implement his vision. On the other hand, managers must use entrepreneurial skills to manage change and innovation.

According to Kao (1989), in general the position of entrepreneurs is to place themselves against the risk of shocks from the company they build (venture). Entrepreneurs have a risk to their own finances or other people's financial trust in starting a business. He also risks the negligence and failure of his business. Instead managers are more motivated by the goals charged and compensation (salary and other benefits) that they will receive. A manager is intolerant of something that is uncertain and confusing and is less risk-oriented than entrepreneurs. Managers prefer salary and a relatively safe position at work.

Entrepreneurs have more intuition skills in considering a possibility or feasibility and feeling in proposing something to others. On the other hand, managers have rational expertise and a detailed and rational-oriented skills.

A very classic debate is the debate about whether the entrepreneur is born (is borned) which causes someone to have an external talent to become an entrepreneur or otherwise the entrepreneur is formed or is made. Some experts argue that the entrepreneur is born in part of the opinion stating that the entrepreneur can be formed with various examples and arguments. For example, a person does not have a tertiary education but now he is a national big fan. On the other hand there are now many leaders / owners of companies that are highly educated but their reputation has not exceeded that person.

Another opinion is that entrepreneurs can be formed through an education or entrepreneurship training. For example, after World War 2, several war veterans in America learned entrepreneurship. They learn entrepreneurship through an education or training in both short education / training and tiered education / training. With knowledge capital and other facilities they are entrepreneurs. Samuel Walton, founder of Walmart, now the world's largest retailer, is a veteran who started his business at the age of 47. Ross Perot, the founder of Texas Instrument who has run for US president from an independent party, is also a veteran who was successfully formed as an entrepreneur.

Some say that someone is an entrepreneur because of the environment. For example, many descent citizens become successful entrepreneurs because they live in the environment of entrepreneurs or business people. A very moderate opinion is not to contradict whether the entrepreneur is born, formed or because of the environment. This opinion states that to be an entrepreneur is not enough just because of talent (born) or just because it is formed. Entrepreneurs who will succeed are entrepreneurs who have talents which are then formed

through an education or training, and live in an environment related to the business world.

Someone who although talented but not formed in an education / training will not be easy to entrepreneurship in the present. This is because the business world in this era faces more complex problems compared to the previous era. Conversely, people whose talents have not been seen or may still be buried if they have an interest in strong motivation will be easier to form as entrepreneurs. For those who want to learn entrepreneurship do not refer to talented or not. The important thing is to have a strong interest and motivation to learn entrepreneurship.

Like mushrooms in the rainy season, now the term constructivism is spreading in the world of education. The emergence of the term constructivism is in line with the confusion of educational institutions, especially in implementing the practical level of education. According to Brooks & Brooks (2007) constructivism is more a philosophy and not a learning strategy. "Constructivism is not an instructional strategy to be deployed under appropriate conditions. Rather, constructivism is an underlying philosophy or way of seeing the world.

Even further explained, constructivism is "a theory of knowledge with roots in philosophy, psychology and cybernetics. Defined radical constructivism always forms the conception of knowledge. It sees knowledge as something that actively receives anything through healthy thoughts or through communication. It is actively embodied by building knowledge. Cognition is adaptive and allows something to organize the experience of the world, not to find a goal of reality. This is different from the view of the objectivists that knowledge is stable because the essential wealth of the object of knowledge and relatively unchanging. metaphysically the objectivist assumes that the world is real, it is structured, and that structure can be modeled for students. Objectivism still believes that the purpose of the mind is to mirror that reality and structure are through a process of thinking that can be analyzed and decomposed. It means that it is produced by a thinking process that is outside the learner, and is determined by the structure of the real world.

This is different from the view of constructivism which assumes that knowledge and reality do not have an absolute goal or value or, at least, that we have no way of knowing this reality. Von Glasersfeld (2013) points out in this connection the concept of reality: It consists of a network of things and relates that we rely on our lives, and others are the same with them, we believe, others lean too (Murphy, 1997: 7) Students interpret and build a reality based on their interactions and experiences with the environment. Instead of thinking about truth in

relation to a match with reality. Also, focusing on the thoughts of continuity in constructivism, concepts, models, theories, and so on. So it can be distinguished between radical constructivism, social, physical, evolutionary, postmodern constructivism, social constructivism, constructivism of information processing, and constructivism of cybernetic systems (Ernest, 2015).

Thus the scope of constructivism epistemology is clearly so broad and difficult to name. Depending on who reads, you may get a slightly different interpretation. However, many writers, educators and researchers seem to have an agreement on how this constructivism epistemology should influence education learning and practice. The following section reminds us, what is the meaning of constructivism for learning. It is important for a consideration if taking a certain form of activity, besides giving in the aspect of curiosity as part of its academic passions, it is also important to understand the meaning contained in the effort to improve a learning system that provides something more useful, coherent and convincing as an alternative approach. better learning.

Furthermore, in theory, constructivist learning model is a learner-centered learning approach, which gives students the freedom to create and explore ideas. While entrepreneurship is an attitude that encourages someone to be creative and dare to take risks for his actions. Thus, a temporary conclusion can be stated that theoretically constructivist learning models have an impact on entrepreneurial intentions. This theory was later reinforced by Hsiao's (2012) research in his article Is entrepreneurial education available for graduates ?, revealed that entrepreneurship education can be done through constructivist learning models, especially in the subjects of the social sciences.

Also, Arpiyanen (2013) in an article "The Sources and Dynamics of Emotions in Entrepreneurship Education Learning Process", revealed that entrepreneurial intentions can be built through learning models. Then, Aydin (2013) in his article entitled "Learner Acquisition and Its Relationship with Constructivist Learner in Canada" states that constructivist learning models have a real impact on creative and innovative behavior. Lans et al. (2013) in his article "Learning For Entrepreneurship in Heterogeneous: Experience From Higher Education Programme", explained that entrepreneurial intentions can be built with constructive learning. This research was conducted on students at several universities in Hong Kong.

Boghasoa's (2014) research results in his article "Applicability of Constructivist Theory in Qualitative Educational Research" reveal that constructivist learning models have an influence on creative behavior and encourage the formation of entrepreneurial culture.

Another research result, Illie (2014) in his article "Developing entrepreneurial competencies in students through constructivist education" which explains that entrepreneurial skills can be built through constructivist learning, increasingly reinforcing the importance of constructivist models to be carried out on the younger generation.

Some of the research findings are more logical because it is supported by new research findings by Earnest (2015) in his article "Towards Entrepreneurial Learning Competencies: The Perspective of Built Environment Students" clearly states that entrepreneurial competence is built through learning that encourages creative behavior, which is known with constructivistic. Also the latest research conducted by Zebua, Masidin & Jama (2015) in his article "Developing the Active Learning Model for the Effectiveness of the Study Group on Entrepreneurship in Higher Education" which revealed that active learning models which is a constructivist characteristic has a significant effect on entrepreneurship, further emphasizing that constructivistic linkages are very close in the formation of attitudes of entrepreneurial intentions. Thus, based on some of previous studies, the formulation of the hypothesis is constructivist learning models have a significant effect on entrepreneurial orientation.

## II. METHOD

This research uses explorative research approach. This is due to the first stage there will be a study and survey of the development models that have been implemented and then based on the results of the study, an adaptive constructivist learning model is developed that can build entrepreneurial intentions. While the operational definition of the research variable and its indicators are (a) constructivistic learning is a learning model whose learning approach is centered on students, gives students the freedom to be creative, explore ideas and uphold tolerance and social empathy towards the diversity of intelligence and talents and (b) entrepreneurial intention is the desire and attitude of a person to produce something new by braving risks and uncertainties in order to achieve profit and growth by identifying opportunities and combining the resources needed to make it happen.

The population in this study were all Vocational High School students in Malang, with a total of 11,505 active students. While from the number of school units, Malang City has 62 Vocational Schools, in Malang Regency 76 Vocational Schools and Batu 10 Vocational Schools. The sampling technique will be carried out proportionally, so that each Malang City, Malang Regency and Batu City will have the same proportion. Both the proportion of the number of vocational schools that will become the sample and the number of students who will be used as research respondents. While the selection of respondents will use a proportional random sampling technique, so that the sample is representative.

According to the research flowchart, the initial activities that will be carried out are literature study and questionnaire preparation. After the questionnaire was valid and reliable, then distributed to the respondents of selected vocational school students (100 students) as a minimum requirement for SEM analysis. Primary data were analyzed by desk analysis and structural equation model (SEM), with the help of the Partial Least Square (PLS) data processing program.

## III. RESULTS & DISCUSSION

Based on the survey results of research, based on data from the Education Office of Malang City, Malang Regency and Batu City, in 2017 the number of good public and private vocational schools in Malang City there were 62 vocational units, in Malang District 76 units and Batu City 10 units. While the number of active students is 11,505 students. A relatively large number of young people, when equipped with entrepreneurship, will be an extraordinary regional asset. In fact, it will also reduce the burdens of local governments related to providing employment opportunities. That is, because vocational schools graduates will become productive human resources and do not depend anymore on job openings, which have become increasingly difficult lately.

Furthermore, the results of inferential analysis are shown by the path diagram of the relationship between constructivistic learning models and entrepreneurial intentions, as follows:

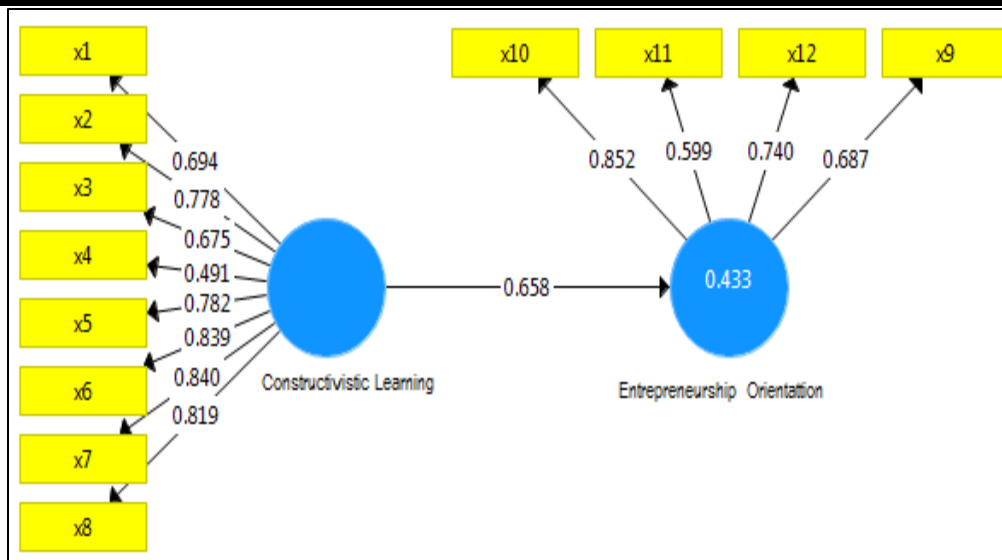


Fig.2: Linkages of Constructivistic Learning with Entrepreneurship Orientation

Source: Primary Data Processed, 2018.

Based on Figure 2 it is revealed that all loading factors greater than 0.40. The meaning of the instrument used in this study is valid and reliable. Furthermore it was revealed that there was a positive influence on constructivist learning on entrepreneurial orientation with a coefficient of 0.658.

Table.2: Path Coefficient

	Original Sampl...	Sample Mean (...)	Standard Devia...	T Statistics ( O...	P Values
PK -> OK	0.658	0.673	0.058	11.258	0.000

Source: Primary Data Processed, 2018

Based on table 2 about the path coefficient, it is revealed that constructivist learning has a significant effect on entrepreneurial orientation. This is because the T Statistics value of 11.258 is greater than 2.0 and P Value of 0.000 is less than 0,050.

The results of this study support some of the previous findings, including those expressed by Arpiyanen (2013) in an article "The Sources and Dynamics of Emotions in Entrepreneurship Education Learning Process", revealing that entrepreneurial intentions can be built through learning models. Then, Aydin (2013) in his article entitled "Learner Acquisition and Its Relationship with Constructivist Learner in Canada" states that constructivist learning models have a real impact on creative and innovative behavior. Lans et al. (2013) in his article "Learning For Entrepreneurship in Heterogeneous: Experience From Higher Education Programme", explained that entrepreneurial intentions can be built with constructive learning. This research was conducted on students at several universities in Hong Kong.

The results of this study also reinforced Boghasoa (2014) in his article "Applicability of Constructivist Theory in Qualitative Educational Research" reveals that constructivist learning models have

an influence on creative behavior and encourage the formation of entrepreneurial culture. Another research result, Illie (2014) in his article "Developing entrepreneurial competencies in students through constructivist education" which explains that entrepreneurial skills can be built through constructivist learning, increasingly reinforcing the importance of constructivist models to be carried out on the younger generation.

Some of the research findings are more logical because it is supported by new research findings by Earnest (2015) in his article "Towards Entrepreneurial Learning Competencies: The Perspective of Built Environment Students" clearly states that entrepreneurial competence is built through learning that encourages creative behavior, which is known with constructivist. Also the latest research conducted by Zebua, Masidin & Jama (2015) in his article "Developing the Active Learning Model for the Effectiveness of the Study Group on Entrepreneurship in Higher Education" which revealed that active learning models which is a constructivist characteristic has a significant effect on entrepreneurship, further emphasizing that constructivistic linkages are very close in the formation of attitudes of entrepreneurial intentions.



#### IV. CONCLUSIONS

Based on the analysis of research results revealed that constructivist learning models significantly effect on entrepreneurial orientation. It means when a vocational school intends to create a new entrepreneurship, one of the efforts that must be done is to apply a constructivist learning model. Besides that, with optimal implementation, it will at the same time guarantee more optimism which is the mission of every secondary education institution in the Greater Malang region, even in this country. Based on the conclusions of the results of the study on the relationship of constructivistic learning with entrepreneurial intentions, the next researcher should focus on the findings of this research, especially on the sharing ideas that give the greatest influence on constructivist learning. Its means, further research should focus on these indicators. This is due to have a big impact on the entrepreneurial intention of vocational students in Malang.

#### REFERENCES

- [1] Arpiyanen, et all. (2013), The Sources and Dynamics of Emotions in Entrepreneurship Education learning Process, *Trames Jurnal*, 17(4), 331–346
- [2] Aydın, A. (2013), Learner Acquisition and Its Relationship with Constructivist Learner Roles in Canada, *International Education Studies Juornal*, 6 (7), 88-100.
- [3] Boghasoa, T. (2014), Applicability of Constructivist Theory in Qualitative Educational Research, *American International Journal of Contemporary Research*, 4 (7), 51-60
- [4] Brooks S. Dan Brooks, Jr (2007), *Constructivism Learning Model*, The Student Edition Series, The Cambridge Press, London.
- [5] Geoffiey, J., (2009), *Manager and Entreprenur*, The Fourt Edition, Longman Publishing, New Delhi.
- [6] Hsiao, et all., (2012), Is entrepreneurial education available for graduates?, *African Journal of Business Management* , 6(15), 5193-5200
- [7] Hisrich, H; Peters, T dan Sheperd, S (2008), *The Spirit of Entrepreneurship in the Changing Era*, The Third Edition, McMillan Publishing, Philadelphia.
- [8] Earnest, Matheu, S dan Samuel, A., (2014), Towards Entrepreneurial Learning Competencies: The Perspective of Built Environment Students, *Jurnal of Higher Education Studies*, 5(1), 20-31
- [9] Ernest, P. (2015). *The one and the many*. In L. Steffe & J. Gale (Eds.). *Constructivism in education*, New Jersey: Lawrence Erlbaum Associates, Inc.
- [10] Earnes, K., Mathew S. & Samuel (2015), Towards Entrepreneurial Learning Competencies: The

Perspective of Built Environment Students, *Jurnal of Higher Education Studies*; 5 (1), 20-21

- [11] Illie, V. (2014), Developing entrepreneurial competencies in students through constructivist education, *Education Journal*, 3(5), 293-302.
- [12] Kao, Z. (1989), *The Fundamental of Entrepreneship*, 1st Ed. Longman Co, New York.
- [13] Lans, et all., (2013), Learning Fo Entrepreneurship in Heterpgeous: Experience From Higer Education Programme, *Trames Jurnal*, 17(4), 383–399.
- [14] Zebua, E.; Masidin, S. & Jama, J., (2015), Developing The active Learning Model to Improve the Effectiveness of Entrepreneurship in Higher Education, *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 20 (1), 24-28
- [15] .....World Bank Annual Report, 2017