



# Fullchis Nurtjahjani<sup>1\*</sup>, Joko Samboro<sup>2</sup>

1,2 Politeknik Negeri Malang, Indonesia

Corresponding E-mail: <u>fullchis@polinema.ac.id</u><sup>1\*</sup>, <u>joko.samboro@polinema.ac.id</u><sup>2</sup>

Received: 21 November 2024 Published: 26 January 2025

Revised: 30 November 2024 DOI: <a href="https://doi.org/10.54443/ijerlas.v5i1.2409">https://doi.org/10.54443/ijerlas.v5i1.2409</a>
Accepted: 13 December 2024 Publish Link: <a href="https://radjapublika.com/index.php/IJERLAS">https://radjapublika.com/index.php/IJERLAS</a>

### **Abstract**

The purpose of this research is to test the suitable structural learning model and which a learning model of entrepreneurship based in constructivism can build attitude and entrepreneurial motivation of students. This research includes explanatory research or hypothesis testing. The subject of this research is from the student in Business Administration Polytechnic State of Malang who has passed the Entrepreneur subject. The sampling has been done by multistage sampling by random sampling. Data analysis used Structural Equation Modeling (SEM). Based on the results of the study and discussion, it shows that constructivist-based entrepreneurship learning has an effect on entrepreneurial attitudes and entrepreneurial competence. Furthermore, constructivist-based entrepreneurial attitudes and competence have no effect on entrepreneurial motivation. Other results show that entrepreneurial attitudes and competence have no effect on entrepreneurial motivation. The indirect hypothesis shows that there is an effect of constructivist-based entrepreneurial motivation, and there is a significant effect between constructivist-based entrepreneurial motivation and entrepreneurial competence but there is no positive and significant effect on the entrepreneurial motivation variable.

Keywords: constructivistic-based entrepreneurship learning, attitudes, competence, motivation, entrepreneur

### INTRODUCTION

Learning is a process of changing values, attitudes, skills, and behavior. One way to change these attitudes and behaviors is through a persuasive approach, namely by inserting new ideas, thoughts, opinions, and even facts through communicative messages (learning process). In Thorndike's connectionism theory (law of exercise) (in Sudjana, 2000) it is stated that the effectiveness of learning depends on the readiness of the learner (law of readiness), the pleasure of the learner (law of effects) and the frequency of use of learning materials (law of use-disuse). Someone who has a strong pleasure and motivation to learn and often applies the results of his learning will master the field he is studying. The current phenomenon shows that entrepreneurship is a discipline that can be learned and taught. According to Ciputra, entrepreneurial competence is not magic.

Higher education needs to teach three competencies to its students, namely creating opportunities (opportunity creator), creating new original ideas (innovator) and daring to take risks and being able to calculate them (calculated risk taker). The roles played by universities are: (i) internalization of entrepreneurial values, (ii) improvement of skills (transfer of knowledge) in marketing, financial, and technological aspects; and (iii) support for entrepreneurship (businesssetup) (Vallini and Simony, 2007). According to the ASHE Higher Education Report (2007), the success of student studies is determined by two measures, namely (i) the amount of time and effort students are involved in the learning process and (ii) the ability of higher education institutions to provide resource services, curriculum, facilities and activity programs that attract student participation to improve actualization, satisfaction and skills. In the context of entrepreneurship education, it seems that student participation and higher education institutions' capabilities need to be synergized, in order to provide the best possible services to produce

Fullchis Nurtjahjani and Joko Samboro

student entrepreneurs. Thus, through education, the need for the number and quality of entrepreneurs can be planned.

The scientific character of entrepreneurship is designed to know, do, and become an entrepreneur. The educational objectives to know and to do are integrated into the curriculum of the study program, distributed in scientific courses. Integration is intended for internalization of entrepreneurial values. In this stage, universities provide entrepreneurship courses aimed at providing motivation and forming an entrepreneurial mental attitude. Meanwhile, the objective to be an entrepreneur is given in practical business skills training. Students are trained to realize technological innovation into business practices.

Entrepreneurship Course is a material taught from semester 1 to semester 6. The Learning Model used in Entrepreneurship learning is the Constructivist learning model, which is a student-centered learning model, where students will construct entrepreneurial knowledge based on real experiences, both in class and outside the classroom, through various media and learning sources. Therefore, the constructivist learning model that applies learning by doing, which is creative and innovative, is very suitable for fostering students' attitudes and motivation to become entrepreneurs. One of the causes of unemployment problems is the education system that only produces technical skills, which have not provided much benefit to the country (Danuhadimejo: 1998). Or the inability and lack of courage of job seekers to become entrepreneurs (Mardikanto: 1997). Those who have successfully completed formal education generally only want to become civil servants or employees, rarely want and are able to create and develop jobs, either for themselves or for others or entrepreneurs (Gimin: 2000).

This reality indicates that new schools are only able to prepare students to fill the job market and have not been able to prepare them to become entrepreneurial people. Entrepreneurship teachers in vocational schools play a very strategic role in instilling an entrepreneurial attitude for students, so that the mindset of vocational school students changes from "graduating and looking for work" to "graduating from vocational school creates jobs" or becomes entrepreneurs. The birth of entrepreneurs means that more jobs are created (Danuhadimedjo: 1998). The creation of jobs will have a positive contribution to the eradication of unemployment and poverty. Likewise, the success of a country's economic development is actually determined by the existence of adequate entrepreneurs who are able to think innovatively and creatively, because according to Schumpeter in Thomas and Mueller (2000) that increasing entrepreneurial activity in society can contribute to development. Seeing the reality above, we can immediately see the big and strategic role for vocational schools to change students' attitudes from "looking for work" to "creating jobs/entrepreneurs". The role that can be played by Entrepreneurship Teachers is very strategic, because entrepreneurship subjects are seen as being most closely related to this.

This research is an explanatory research or hypothesis testing. The subjects of the research consisted of students in the Business Administration Department of Malang State Polytechnic who had taken the Entrepreneurship Course. Sampling was carried out using multistage sampling, through two stages. Stage I: Determination of classes in the Business Administration Department taken by purposive sampling; stage II: Sampling of students in each class taken by random sampling. The data analysis used is Structural Equation Modeling (SEM). Measurement of entrepreneurial values and attitudes refers to Pareno (2001), while entrepreneurial motivation refers to McLelland (1998)

### LITERATURE REVIEW

# **Constructivist-based Entrepreneurship Learning**

Constructivist-Based Entrepreneurship Learning is learning that uses the principles of active student learning, contextual learning, learning by doing and teaching with multi-method teaching. The term constructivism is often discussed in formal meeting forums, such as discussions, seminars, workshops, conferences, and so on. This term can also be found in various journals, working papers or papers. We also know the term in the field of learning. We may also be one of those who want to know a lot about this approach. Constructivism is not a new theory, in fact it emerged 30 years ago (Setyosari, Harianto, Effendi, Sukadi, 1996). It should be noted that if this approach is applied by teachers in the classroom and more students will be more successful (Anserson, 1996). Constructivist theory is concerned with the theory that looks at how students learn. Constructivist teachers observe how each student thinks and then use this information to develop into student learning. De Vries and Zan (1994) stated, "that constructivist education is not just physical-knowledge activities, group games, arithmetic debates, pretend play, blockbuilding, whole language literacy activities, and so forth". The application of the constructivist approach or theory in education concerns the most essential aspects involving various activities, learning materials, and class organization.

Fullchis Nurtjahjani and Joko Samboro

# **Entrepreneurial Attitude**

Entrepreneurship is the activity of moving economic resources from low productivity areas to higher productivity areas and greater results (Drucker, 1985). The definition continues to develop until now. So it can be concluded that entrepreneurship is the ability of an entrepreneur to create a product that was previously ordinary into something that has more value by applying management concepts and management techniques, product standardization, process and equipment design based on training and job analysis, and setting the desired standards so as to increase the results of existing resources and create new markets and customers. an attitude that reflects an ability to think creatively and behave innovatively which is used as a basis, resources, driving force, goals, strategies, tips and processes in adopting life's challenges.

# **Entrepreneurial Competence**

Mitrani, et al. (1992) defines competence as a basic characteristic of an individual that is related to the reason a person becomes effective and superior in his/her work. Competence will differentiate people who perform well from those who are mediocre. Competence can be in the form of motives, talents or traits, self-concepts, attitudes or values or convictions, self-knowledge or cognitive skills in behavior. In general, self-competence consists of elements according to Sandjojo (2004) as follows:

- a. Motives, namely the underlying needs or thought patterns that direct, move and choose individual behavior, for example the need to succeed.
- b. Basic nature (innate or talent) is a tendency or general character in behaving or responding. For example, related to self-confidence, self-control, stress resistance or resilience.
- c. Self-concept, attitudes or values measured by a test asking respondents what they value, what they think or are interested in doing.
- d. Strength of knowledge of facts or procedures, whether technical or interpersonal, as measured by respondent tests. Most findings indicate that knowledge rarely differentiates between average and superior performance.
- e. Cognitive and behavioral abilities or skills, namely whether hidden or visible.

### **Entrepreneurial Motivation**

Motivation comes from the Latin word "movere" or to move, meaning to move from a certain condition to another. Motives are something that exists within humans that arouse, activate, move, direct and channel their behavior towards achieving goals. Thus, motivation occurs through a process that is related to human needs. Successful entrepreneurs must be willing to use power over subordinates, tell them what to do, and apply positive and negative sanctions quickly. An entrepreneur must have the determination to follow through and have the fortitude to ensure that changes have been institutionalized in his business. Therefore, a firm attitude must be shown in all things that are right, and for the smooth running of the business the following things must be done: 1) satisfying customers, 2) growth, 3) cost suppression, 4) innovation and the latest features of a brand, 5) observing events quickly to take effective actions, and 6) the quality of the goods to be produced.

### **METHOD**

The study is intended to test and analyze the application of constructivist-based entrepreneurship learning and its influence on the cultivation of entrepreneurial traits, competencies and motivation to become entrepreneurs. Based on the objectives to be achieved, this study, when viewed from the nature of the relationship between variables, is an explanatory study. The approach used is a survey and is included in the type of cross-sectional research. The population of this study was all students of the Business Administration Department of the State Polytechnic of Malang who had taken the Entrepreneurship Course. The number of samples in the SEM analysis was between 100 - 200 (Solimun, 2002). Data analysis used descriptive analysis, to describe the primary data collected to explain the conditions of the respondents in accordance with the research objectives. Furthermore, data analysis was carried out using a structural equation model using Lisrel

Fullchis Nurtjahjani and Joko Samboro

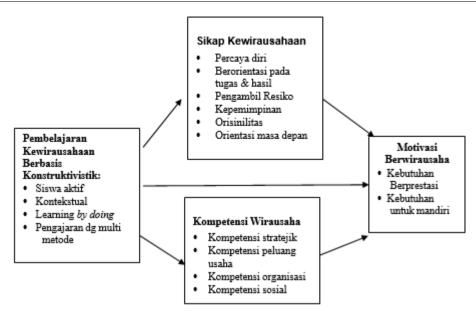


Image 1. Conceptual Framework

Based on the formulation of the problem, and theoretical and empirical studies as well as the conceptual framework of the research, the research hypothesis is as follows:

H1: Constructivist-based entrepreneurship learning for students in the Business Administration Department of Malang State Polytechnic has a positive and significant influence in forming entrepreneurial attitudes.

H2: Constructivist-based entrepreneurship learning for students in the Business Administration Department of Malang State Polytechnic has a positive and significant influence in forming entrepreneurial competencies.

H3: Constructivist-based entrepreneurship learning for students in the Business Administration Department of Malang State Polytechnic has a positive and significant influence in forming entrepreneurial motivation.

H4: Entrepreneurial attitudes positively and significantly influence the formation of students' entrepreneurial motivation.

H5: Business competence positively and significantly influences students' motivation to become entrepreneurs.

H6: Constructivist-based entrepreneurship learning positively and significantly influences students' motivation to become entrepreneurs through the mediation of entrepreneurial attitudes.

H7: Constructivist-based entrepreneurship learning positively and significantly influences students' motivation to become entrepreneurs through the mediation of entrepreneurial competence.

### RESULTS AND DISCUSSION

In this chapter, the results and discussion will be presented through several stages including reliability and validity tests, significance tests, measuring model accuracy (goodness of fit) and the overall influence of variables.

# Validity and Reliability Test

The reliability and validity test of the Quisner can be seen from the overall T-Value diagram which can be seen in Figure 2 below:

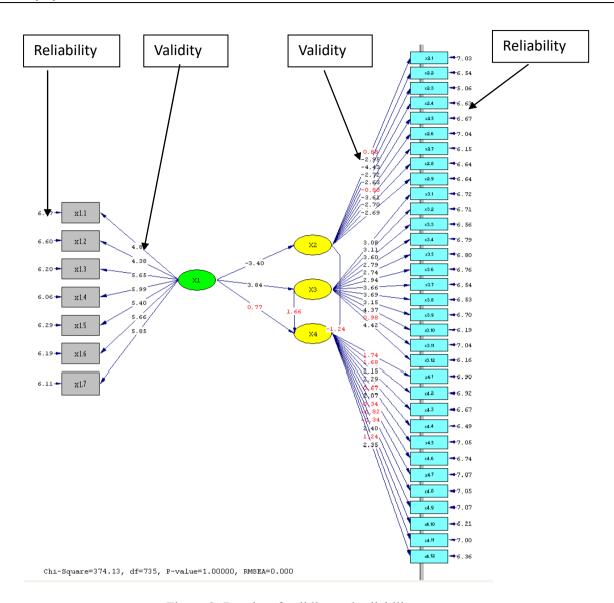


Figure 2. Results of validity and reliability tests

Reliability and Validity of data can be shown as in diagram: 2, above (black color), or the value is >1.96. meaning Valid (accurate). This means that the items used in this questionnaire are appropriate or suitable to measure the variables X1: variable of Constructivist-Based Entrepreneurship Learning, X2: variable of Entrepreneurial Attitude, X3: variable of Entrepreneurial Competence. and X4: variable of Entrepreneurial Motivation. If it is said to be reliable (consistent) if it is done at different times the results remain consistent, while if the color is red or the value is <1.96 it can be concluded that the data used is and is not reliable. So all the variables studied are valid but not all of them are reliable

# **Significance Test**

To answer the hypothesis that has been submitted, a significance test is required. This test can be seen in Figure 2 above and will be described as follows:

- 1. There is a negative and significant influence between Variable X1 (Constructivist-Based Entrepreneurship Learning) and Variable X2 (Entrepreneurial Attitude), meaning that the higher the Constructivist-Based Entrepreneurship Learning provided, the lower the Entrepreneurial Attitude.
- 2. There is a positive and significant influence between Variable X1 (Constructivist-Based

### Fullchis Nurtjahjani and Joko Samboro

Entrepreneurship Learning) and Variable X3 (Entrepreneurial Competence), meaning that the higher the Constructivist-Based Entrepreneurship Learning provided, the higher the Entrepreneurial Competence.

- 3. There is no positive and significant influence between Variable X1 (Constructivism-Based Entrepreneurship Learning) and variable X4 (Entrepreneurial Motivation), meaning that Constructivism-Based Entrepreneurship Learning has no significant effect on Entrepreneurial Motivation.
- 4. There is no positive and significant influence between Variable X2 (Entrepreneurial Attitude) and variable X4 (Entrepreneurial Motivation), meaning that Entrepreneurial Attitude has no significant effect on Entrepreneurial Motivation.
- 5. There is no positive and significant influence between Variable X3 (Entrepreneurial Competence) and variable X4 (Entrepreneurial Motivation), meaning that Entrepreneurial Competence has no significance on Entrepreneurial Motivation.
- 6. There is a negative and significant influence between Variable X1 (Constructivist-Based Entrepreneurship Learning) and Variable X2 (Entrepreneurial Attitude) and there is no positive and significant influence with variable X4 (Entrepreneurial Motivation) meaning that the higher the Constructivist-Based Entrepreneurship Learning given, the lower the Entrepreneurial Attitude but this does not mean anything about Entrepreneurial Motivation.
- 7. There is a positive and significant influence between Variable X1 (Constructivist-Based Entrepreneurship Learning) and Variable X3 (Entrepreneurial Competence) but there is no positive and significant influence with variable X4 (Entrepreneurial Motivation) meaning that the higher the Constructivist-Based Entrepreneurship Learning provided will increase Entrepreneurial Competence, but this does not mean anything about Entrepreneurial Motivation.

From The description above can be concluded that variable X1 is negative and significant to variable X2 (black color) and variable X is positive and sig. to variable X3, meaning that variables X2 and X3 have an influence on variable X1, while the other variables (red color) are not significant, in other words these variables do not have a significant influence.

### Goodness of fit

Whether the model used to test the theoretical concept is good or not, the goodness of fit test is used, as below:

Goodness of fit measure **Match Level Estimation Model Description** No Results 1 Chi Square p>0.05 or p>0.10 P = 1,000Nice model 2 **RMR**  $\leq 0.05$ 0.0666 Nice model 3 RMSEA < 0.08 0.00 Nice model 4 **GFI**  $\geq 0.90$ 0.842 Pretty good model  $\geq 0.\overline{90}$ 5 **AGFI** 0.824 Pretty good model 6 CN > 200 265,778 Nice model

Table 1. Goodness of fit

Fullchis Nurtjahjani and Joko Samboro

### **Overall Influence of Variables**

The influence of the variables studied can be seen in Figure 3 estimates below:

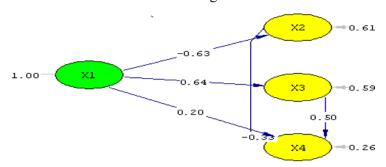


Figure 3. Estimates

Based on diagram 3 above, the magnitude of the influence of the variables studied is:  $(0.6 \times -0.33) + (0.64 \times 0.5) + 0.20 = 0.7279$  or 72.79%, this shows that the variables studied can contribute to the existing problems by 72.79%.

### Discussion

# Constructivist Learning and Cultivation of Entrepreneurial Attitudes and Competencies

Constructivist-based Entrepreneurship Learning can help achieve academic skills and motor skills in Entrepreneurship. Theoretically, the achievement of academic skills is possible as a result of motivational effects that lead to increased attention and intensity of student involvement in the learning process period using their conceptual knowledge, so that their conceptual knowledge becomes broader and deeper (Waras, 2003). In addition, constructivist-based learning (projects) is based on a constructivist perspective, where learning is not purely a stimulus-response phenomenon as perceived by the behavioralists. Then, the project tasks chosen and determined by students are also very likely to be based on the conceptual knowledge they already have. In this context, real activities carried out in constructivism provide learning experiences that can help reflection/abstraction and bring real-world activities closer to the conceptual knowledge that underlies them, so that

The advantages of constructivist learning can also be explained from the Constructive Learning Theory. Simmons (1996), states that memory representation is divided into 3 types, namely semantic, episodic and action representations. Semantic representation refers to concepts and principles in a discipline with accompanying characteristics. Episodic representation is based on personal and affective experiences, while action representation refers to things that are done using semantic and episodic information, for example solving certain types of problems using certain knowledge. Thus, constructivist-based learning is more likely to foster students' efforts to build complex and rich memory representations and build strong relationships between semantic, episodic and action knowledge. This finding is in line with research that has been conducted by several researchers: Watson, Prieto & Dillon (1995) who concluded that understanding the concept of discussion among students who learn through constructivism is better than students who learn in traditional classes. Spinger, Stanne & Donovan (1999) and Johson, Johnson & Stanne (2000) studied a number of courses, concluding that collaborative learning of small groups of students in constructivism with projects will improve academic skills. Bragg & Reger IV (2000) concluded that the integration of academic & technical (vocational) learning can improve academic skills as well as technical skills. Thomas (2000) concluded that constructivist (project) based learning improves academic skills. While Waras (2003) showed that the academic skills (understanding of concepts & principles) of engineering students who took courses based on projects were higher than learning with training methods, but lower in achieving technical skills than learning with training.

As for the improvement of motor skills, from a theoretical perspective, this finding can be explained through the Motor Learning theory of the "development rate" of motor skills (Schmidt, 1988) which states that the theory includes: 1) learning technical operational skills (motor) is a process of achieving the capacity to do; 2) Learning technical operational skills which are the result of practice/experience; and 3) The process of producing relatively permanent changes in skills. Thus, this finding is in line with research conducted by: Knoll (2002) which states that constructivist-based learning (projects) improves academic skills as well as technical skills. Santiyasa (2004) found that there were differences in conceptual understanding between students who learned using cooperative learning settings Group Investigation (GI) and Student Team-Achievement Division (STAD) Thomas

# Fullchis Nurtjahjani and Joko Samboro

(2000) & Bragg & Reger IV which stated that technical skills increased together with academic skills from learning that integrated academic and vocational. Atio & Hansen (2002) concluded that constructivist (project) based learning that integrates academic and occupational domains will be superior in achieving technical thinking rather than technical motor skills.

Formation of Entrepreneurial Attitudes and Competencies Can entrepreneurial attitudes and competencies be taught? Frederich and Guerts (1990), stated that entrepreneurial education as value education needs to be taught in economics/business/accounting subjects through formal education, so that students' entrepreneurial knowledge, attitudes and skills will increase and become more positive towards entrepreneurial activities. Theoretically, a person's attitude can be formed (Azmar in Purnomo, 2004). A person at the age of 12-30 years is still a period that allows for the process of attitude change, so that this period is known as the critical period. In this period, the role of formal education is very large as a vehicle for the process of forming a person's entrepreneurial attitude (Morgan According to Purnomo (2004), this is because it is supported by the existence of entrepreneurship learning information media, where students obtain information about entrepreneurship from interactions with the community, friends, parents (67.452%), media (27.685%) and courses (4.86%). Sumanto (2002) stated that entrepreneurial humans have strong personality traits, namely: having high morals, having an entrepreneurial mental attitude and having broad knowledge skills. Therefore, according to Sutarjo (2003) the entrepreneurship development program is implemented to foster an entrepreneurial spirit in students and teachers and is expected to be a vehicle for synergistic integration between mastery of science and technology and an entrepreneurial spirit. To prepare entrepreneurial people, schools need to teach entrepreneurship to their students, where improvements that should be made in schools include improvements to the teaching and learning process in schools to teach students actively, improvements to the tutoring system and improvements to learning methods (Sumanto, 2002).

Formal learning in schools empirically contributes greatly to entrepreneurship learning, as stated by Gimin (2000), that there is a significant difference in entrepreneurial attitudes between students who have taken entrepreneurship subjects and those who have not. This is reinforced by Rusman (2007) that there is a contribution between learning achievement in entrepreneurship training subjects and entrepreneurial interest in students in the electronics field in Makassar City. The results of this study are in accordance with the results of Purwanti's research (2003) on entrepreneurial values having a positive effect on entrepreneurial attitudes. Entrepreneurial values, entrepreneurial attitudes can be improved by instilling discipline, seriousness and responsibility towards learning so that it can foster an entrepreneurial spirit. According to Winarno (2007), who conducted research on the Internalization of Entrepreneurial Values at SMK 3 Malang City, he stated that in general, the entrepreneurial values of students before being involved in the learning process at school

abstract (latent), which is in the form of self-confidence and motivation values that come from learning in the family. While the values that can be relatively constructed in the learning process are self-confidence values that are increasingly built due to the increasing ability in the field of production skills (vocational) and academic skills that are possessed, so that they have the potential to foster other entrepreneurial values, such as: creativity, motivation, risk-taking and leadership. Meanwhile, Bennet (2006), based on the opinions of his research respondents, stated that entrepreneurship can be learned, where more than 60% of respondents stated that entrepreneurship can be taught, where the learning object must lead to the formation of creative, reflective and innovative entrepreneurial competencies and attitudes through internships in business practices.

The learning techniques used are the case study approach, independent projects, mandatory reading, work groups and seminars/tutorials. Meanwhile, Purnomo (2004) stated based on the results of his research that overall and partially, the variables of education, ethnicity, gender, parental occupation and residential environment have a significant relationship with entrepreneurial attitudes (contribution 51.7%). In terms of level, the strongest to the lowest relationship in the formation of entrepreneurial attitudes are formal education, non-formal/informal education, parental occupation, ethnicity, residential environment and gender variables. In addition, the existence of a fairly strong relationship between formal education and entrepreneurial attitudes can be interpreted that if the frequency of entrepreneurial learning in schools is increased, then the entrepreneurial attitudes of students will also increase. The frequency of this learning is not solely seen from the amount of information entrepreneurship alone, but also includes aspects of the delivery era, the relevance of the material used, the achievement of learning objectives and the amount of time provided for the learning process.

The meaning of this education is to take the attitude of the students' habits can be done through education, both formal education and non-formal/informal education. In addition, in the framework of the entrepreneurship

# Fullchis Nurtjahjani and Joko Samboro

learning process (formally and non-formally), teachers and parents and the community need to consider the cultural background of the child and their environment. To assess the success of entrepreneurship learning, Jack & Anderson (1998) stated that at the current and ongoing stages, measures are carried out using indicators including: student enrollment, number/type of course, interest in entrepreneurship and awareness of field. While at the Pre and post course/programme stages, measures are carried out using indicators such as: intention to act, knowledge gained, self-perception of learning and capability.

To achieve the success of the learning, Hynes (1996) stated that entrepreneurship learning must pay attention to input (students), learning methods, learning processes, learning materials and learning outputs. For input, it should pay attention to the needs and desires of students for what students are taking entrepreneurship learning. According to psychologists, including Morgan and King, Howard and Kendler, Krech, Crutchfield and Ballachey (in Pramono, 2004) stated that a person's behavior is influenced by the environment including education, values and culture of society, politics and so on. For that, in the learning process, teachers should use methods that are in accordance with the desired competencies, whether lectures, field practice, observation, internships, case studies and so on. While the learning materials should be directed towards the development of new products, innovation, market research, finance, production, marketing and so on. For learning outputs, it is more directed towards ways of developing new products, making business plans, making decisions, presentations and so on.

Likewise, the opinion from the research results of Tan & Frank Ng (2006) stated that problem-based entrepreneurship learning that stimulates entrepreneurship learning situations in the classroom contributes to improving students' abilities and appreciation of entrepreneurship. Therefore, learning that uses active learning and the application of various disciplines related to learning methods while practicing will improve students' entrepreneurial competence. For this reason, according to Jesselyn Co and Mitchell (2006), schools need to carry out curriculum development that is carried out continuously, evaluate teacher attendance, truly effective assessment methods and establish cooperation with the surrounding community and businesses to improve entrepreneurship education. Likewise, Thornberry (2003) stated that entrepreneurship education that is action learning can truly create entrepreneurship education participants to become entrepreneurs, because understanding entrepreneurship

should be contextual from various theories and concepts with specific industrial sectors (Morrison, 2006).

To support the achievement of the formation of entrepreneurial attitudes and competencies in learning, according to Pramono (2004) the right learning strategy by considering the potential, needs and interests of each individual is different is to prioritize independent learning, although the tutorial model is also needed. Tutorials are needed only to provide a basic framework for thinking and basic knowledge needed by students. Furthermore, the use of inquiry and discovery methods and problem solving are prioritized. This can be used to foster a tenacious attitude, perseverance, accustomed to finding solutions, daring to take risks, knowing the real world which is uncertain, accustomed to facing change and finding opportunities from these changes, all of which are needed by an entrepreneur. In this way, students' learning experiences are more beneficial for fulfilling their interests and learning needs. The hope that is to be achieved is that students' knowledge is in-depth, students' knowledge is useful for life, fosters confidence and self-confidence, is able to see current and future problems, is able to see opportunities that they can take advantage of and is able to create new things. The ultimate goal of this stage is to form a positive attitude towards entrepreneurs. In line with this, Jones and English (2004) stated that entrepreneurship education is a process of forming an individual who has the ability to recognize deep commercial opportunities, self-discovery, knowledge and skills to manage a particular business.

This can be achieved by providing knowledge about recognizing opportunities, the concept of calculating profits, compiling resources with a number of risks and how to start a new business. In this program, the learning process and responsibility that occurs shifts to a student-centered learning process, where this learning method provides a challenge that tends to teach practice. This learning method with a practical approach, according to Gartner (2006) will give rise to students' ability to narrate what and how entrepreneurship is from other people's entrepreneurial experiences so that it can generate ideas to form a narrative of entrepreneurial knowledge in their minds. For the relationship between the entrepreneurial learning process in forming students' entrepreneurial competencies, Imtikhana (2003) stated that one of the supporting factors for students' entrepreneurial readiness is the achievement of learning achievements oriented towards entrepreneurial competencies. This is reinforced by the results of Suparman's research (2003), where there is a correlation between entrepreneurial learning and students' interest in entrepreneurship. Senge (2000) learning experiences are able to develop the potential of students as used to solve problems in real life. Meanwhile, Hamalik (1990) stated that one dimension to improve and grow the type

# Fullchis Nurtjahjani and Joko Samboro

of entrepreneurship is to develop the work skills needed to carry out work tasks in the field of work according to the interests and abilities of a person. This is reinforced by the results of Subkhan's research (2002) which stated that entrepreneurial competencies in vocational schools show a positive correlation between entrepreneurial knowledge and productive expertise competencies.

# Constructivist Learning and Motivation to Become an Entrepreneur

Theoretically and empirically, it is stated that the success factors of entrepreneurship learning are largely determined by internal and external factors. Internal factors of students consist of students' value orientation, motivation and prosocial behavior. While external factors are largely determined by the learning process carried out at school, family and the environment where the student lives. Rulirianto and Maskan (2007) stated that based on the results of the research analysis, it was known that for the Javanese ethnic group, the relationship between value orientation and motivation, the relationship between motivation and prosocial behavior was not significant. This can be explained that in Javanese (non-Chinese) ethnic students, descriptively it can be seen that the majority of Javanese ethnic students' ideals are job seekers, where out of 47 students (62.5%) prefer to be employees/soldiers/police and work in private companies. In addition, the majority of the parents' work backgrounds of Javanese (non-Chinese) ethnic students are employees/soldiers/retirees, which is 68.5%.

This is different from Chinese ethnic students, where both their ideals and their parents' work backgrounds are more directed towards becoming entrepreneurs, which are 62.5% (35 students) and 78.6% (44 parents of students) working as entrepreneurs, respectively. Therefore, based on empirical and theoretical studies on the differences in the significance of the relationship between value orientation and motivation in Javanese (non-Chinese) ethnic students and Chinese ethnic students, it can be understood. In line with this, Salladien (1996) argues that a student will be interested in studying entrepreneurship if he/she has the belief that entrepreneurship will be able to guarantee his/her future. The results of this study are in line with Purnomo (2004) who stated that overall or partially, the variables of education, ethnicity, gender, parental occupation and residential environment have a significant relationship with entrepreneurial attitudes (contribution of 51.7%). This is in accordance with the results of the study by Purmiyati and Maskan (2002), where students' interest in becoming entrepreneurs is greatly influenced by their parents' occupational background, the major or study program taken at the university and the student's area of origin.

Then, in terms of level, the strongest to the lowest relationship in the formation of entrepreneurial attitudes are formal education, non-formal/informal education, parental occupation, ethnicity, residential environment and gender variables. Furthermore, a fairly strong relationship between formal education and entrepreneurial attitudes can be interpreted, if the frequency of entrepreneurship learning in schools is increased, then the entrepreneurial attitudes of students will also increase. The frequency of this learning is not only seen from the amount of entrepreneurship information, but also includes aspects of the delivery era, the relevance of the material used, the achievement of learning objectives and the amount of time provided for the learning process. In addition, the meaning of this education is to adopt the habitual attitudes of students can be done through education, both formal education and non-formal/informal education. In addition, in the context of the entrepreneurship learning process (formally and non-formally), teachers and parents and the community need to consider the cultural background of the child and their environment.

Meanwhile, the explanation of the insignificant relationship between the relationship between value orientation and entrepreneurial learning and the relationship between motivation and entrepreneurial learning is that in the learning process, methods that are appropriate to the conditions of students, the environment where students live, the learning media used and learning sources will affect students' value orientation, motivation and activeness in participating in entrepreneurial learning. Because, according to Purnomo (2004), it turns out that research shows that students obtain information about entrepreneurship from interactions with the community, friends, parents (67.452%), media (27.6854) and courses (4.86%). To measure the success of entrepreneurial learning, one complete model is the evaluation model from Jack & Anderson (1997). In this model, learning success is evaluated using the Pre and post course/programme measure dimensions, where the indicators used are intentions to act, knowledge gained and self-perception of learning and capability. In line with this, Fraedrich and Guerts (1990) stated that entrepreneurship education as value education needs to be taught in economics/business/accounting subjects through formal education, so that students' knowledge, attitudes and entrepreneurial skills will increase and be more positive towards entrepreneurial activities.

This needs to be done because theoretically a person's attitude can be formed (Azmar in Purnomo, 2004).

# Fullchis Nurtjahjani and Joko Samboro

A person at the age of 12-30 years is still a period that allows for the process of attitude change, so that this period is known as the critical period. In this period, the role of formal education is very large as a vehicle for the process of forming a person's entrepreneurial attitude (Morgan and King, 1975). Likewise, the results of Burn's research (2000) stated that there was a significant difference in entrepreneurial attitudes between students who had taken entrepreneurship courses and those who had not. Rusman (2007) found a contribution between learning achievement in entrepreneurship training courses and entrepreneurial interest in students in the electronics field in Makassar City. The results of this study are in accordance with the results of Purwanti's research (2003) on entrepreneurial values having a positive effect on entrepreneurial attitudes. Entrepreneurial values, entrepreneurial attitudes can be improved by instilling discipline, seriousness and responsibility towards learning so that they can foster an entrepreneurial spirit. Meanwhile, Saptono, et al. (2004) stated that students' entrepreneurial interest has a significant influence on student learning outcomes.

### **CONCLUSION**

Based on the results of the study and discussion, it shows that constructivist-based entrepreneurship learning has an effect on entrepreneurial attitudes and entrepreneurial competencies. Furthermore, constructivist-based entrepreneurship learning does not affect entrepreneurial motivation. Other results show that entrepreneurial attitudes and competencies do not affect entrepreneurial motivation. The indirect hypothesis shows that there is an effect of constructivist-based entrepreneurship learning on entrepreneurial attitudes but there is no significant effect on entrepreneurial motivation, and there is a significant effect between constructivist-based entrepreneurship learning) and entrepreneurial competencies but there is no positive and significant effect on entrepreneurial motivation variables. This study is expected to provide suggestions in order to foster entrepreneurial attitudes and motivation in participating in entrepreneurship learning. The Business Administration Department needs to make improvements including: improving the teaching and learning process with an active student approach, improving the tutoring system and improving with contextual-oriented learning methods based on multimedia and the campus environment. To complement this research, to develop an entrepreneurship learning model in schools consisting of multi-ethnic and cultural, the next research will focus on developing a constructivist-based entrepreneurship learning model with a project approach in the Business Administration Department of Malang State Polytechnic. Based on the research results that have been discussed in Chapter V above, the lecturers in the Business Administration Department of Malang State Polytechnic in teaching Entrepreneurship courses should use a constructivist approach that is more directed towards student-centered learning, by combining several learning methods, such as: lectures, observations, discussions, case studies, simulations or games or learning by doing. The learning sources can come from literature, the internet, the residential environment, companies, business practitioners or lecturers. For lecturers of Entrepreneurship courses, they should conduct research on the development of Constructivist-based Entrepreneurship learning models with variations according to the existing approach.

### REFERENCES

Anderson, T., 1996, What in the world is Constructivism. Learning. March/April, p.48-51

Davies, IK, 1971, The Management of learning. MC Graw-Hill Book Company, Ltd. De Vries, AK, & Zan, B. (1994) Moral Classroom, Moral Children: Creating A Constructivist Atmosphere in Early Education. New York: Teachers College Press.

Degeng, Nyoman S., 2001, Main Ideas of the Learning Revolution in Higher Education, FISIP Unmer Malang.

Degeng, INS, 1997, Learning Strategy, Organizing Content with Elaboration Model: IKIP Malang and IPTPI.

Gimin, 2000, Analysis of the Influence of Small Business Training and Mentoring on Business Success, Dissertation, Postgraduate Program, State University of Malang.

Loeffer, MH, 1992, Montessory in Contemporary American Culture. Portmouth, NH: Heineman Educational Books, Inc. Marbun, BN, 1993, Strengths and Weaknesses of Small Firms, Pustaka Binaman Pressindo, Jakarta.

Purnomo, Bambang Hari, 2004, Analysis of the Relationship between Education, Ethnicity, Gender, Parental Occupation and Residential Environment with Entrepreneurial Attitudes in Vocational High School Students in Jember City, Dissertation, Postgraduate Program, State University of Malang.

Purmiyati, Atik & Maskan, Mohammad, 2002, Factors Influencing Students to Become Entrepreneurs (Study on



# Fullchis Nurtjahjani and Joko Samboro

- Students of Airlangga University, Surabaya), Research by Young Lecturers, DP2M Dikti, Ministry of National Education, Jakarta.
- Rujito, Hari & Yusuf, Cholyubi, 2005, Entrepreneurship, Jember State Polytechnic Rulirianto & Maskan, Mohammad, 2007, Value Orientation Model, Motivation and Behavior
- Prosocial, Its Influence on Entrepreneurship Learning and Entrepreneurial Competence (Comparative Study of Javanese and Chinese Ethnicities in Senior High Schools in Malang City), Fundamental Research, DP2M Dikti, Ministry of National Education, Jakarta.
- Sandjojo, Imam, 2004, The Influence of Business Environment, Entrepreneurial Nature and Business Motivation on Entrepreneurial Learning, Entrepreneurial Competence and Small Business Growth in East Java, Dissertation, Postgraduate Program, Unibraw, Malang
- Setyosari, P., Harianto, E., Effendi, R., and Sukadi, 1996, Teaching Elementary Social Studies. Houston: College of Education, University of Houston.