

**ENTREPRENEURSHIP DEVELOPMENT
MODEL-BASED LEARNING PROJECT FOR GROWING
ENTREPRENEURIAL SPIRIT OF ECONOMIC EDUCATION
STUDENTS PRODI TEACHERS' TRAINING PGRI BOJONEGORO**

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Abstract

The purpose of this study are (1) developing entrepreneurial project-based learning model and (2) to test the effectiveness of a project-based model of entrepreneurial learning to cultivate the entrepreneurial spirit of students on a course of economic education. The method used in this research is *research & development* models DBR (*Design Based Research*) of Reeves (2006). Results of the study are (1) improvement of entrepreneurial learning model with the balance between theory and practice, learning is more focused on practical applicative, and realize the goal of the study program is to produce graduates who have an entrepreneurial spirit; (2) the development of design and prototype consists of three components: learning objectives, learning methods, and assessment; (3) validation test by experts of education, entrepreneurship, and limited testing shows the learning objectives, content, and offerings are in accordance with the content / content, typographical arrangement, and language; (4) test products using the experimental class that is determined based on the learning styles of students, the majority of students have learning styles akomodator, portfolio assessment results indicate the student has a very good and good value, the products produced by the working group students according to the learning style, and test the effectiveness of shows that the implementation of project-based learning is able to foster entrepreneurial spirit of entrepreneurship students very well.

Keywords: entrepreneurship, project-based learning, entrepreneurial spirit

INTRODUCTION

The entrepreneurial spirit played an important role in the world of business and economics. Currently, the government and intellectual stresses the importance of the entrepreneurial spirit among students. Students as one of the intellectuals and the backbone of the reform in the future need to equip themselves with an entrepreneurial spirit. Students are challenged to create their own jobs by way of innovative ideas. This is consistent with the idea put forward by Aghajani & Abbagholipour (2012) that entrepreneurship education programs in colleges should pay attention to and foster the spirit of entrepreneurship.

Entrepreneurship education into the most hotly discussed topic, especially college level. This is caused by the emergence of some problems in entrepreneurial learning, among others: (1) an imbalance between matter theory and practice; (2) lecturers have not realized the importance of entrepreneurial practices; (3) the student has not been able to create ideas and glanced at the business opportunities that exist in the environment due to the lack of understanding of entrepreneurial practices; (4) The entrepreneurial learning process not utilize to the maximum the role of *stakeholders*(Sarjono, 2012).

The college has three important role in entrepreneurial education that is entrepreneurial culture as a facilitator, mediator skills, and the locomotive of regional business development (Edward & Muir, 2005; Khan, 2008; Clouse, et.al, 2005). In essence, the purpose of entrepreneurship education colleges not just print job seekers, but also as a creator of employment (Fitriati, 2011; Ward, 2012; Clouse et al, 2005; Aghajani & Abbasgholipour, 2012; Susilo, 2014; Ekpoh & Edet, 2011; Lee.at.al, 2005).

Based on the role of the college, appropriate efforts to solve the problems of teaching entrepreneurship is through project-based learning model. This model describes the system embed entrepreneurship in various disciplines, innovative, and contextual learning menakan melalau complex activities (Clouse et al, 2005; Cord, 2001; Thomas, Mergendoller, and Michaelson, 1999; Thomas, 2000; Gaer, 1998; Moursund; 1997). Efforts are being made to improve the model of entrepreneurial learning is to apply the model of development of DBR (*Design-Based Research*).

The aim of research and development are (1) developing entrepreneurial project-based learning model and (2) to test the effectiveness of project-based learning model to foster entrepreneurial spirit of entrepreneurship students in courses S-1 FPIPS economic education Teachers' Training PGRI Bojonegoro.

METHODS

The method used in this study is the *research & development* models DBR (*Design Based Research*) of Reeves (2006). Collins (1992) states that DBR is an important methodology to understand how, when, and why the educational

innovation works in practice. The procedure of research and development in this study consists of four phases. The subjects were 36 students of economic education. The collection of data by using the method of observation, portfolios, questionnaires, interviews, and focus group discussions. Data analysis technique used is qualitative analysis, percentage, and different test (t-test).

RESULTS AND DISCUSSION

Identification and Analysis of Needs

Results identification of problems and needs showed (1) the background of the student's understanding of entrepreneurship showed 67% of students have a poor understanding; (2) the implementation of the curriculum for this show learning model used is still focused on the theory and have not been matched by practical activities; (3) the behavior and attitude of students during the learning process less take advantage of the time to the maximum, low learning motivation, and lack of discipline during the learning time in the classroom; (4) the attitude of lecturers still dominate the learning activities that have an impact on students who are passive in the learning process; (5) entrepreneurial learning is still not implemented in accordance with the vision of study program due to the material being taught not been able to foster an entrepreneurial spirit to the fullest; (6) hopes the study program, no improvement model of learning in which students are forced to be more active in the learning process; (7) the recommendations and opinions of stakeholders in learning more FGD states should lead to practical applicative nature.

Based on the elaboration of the above issues obtained the identification of problems of change model of learning according to the students' needs and being able to realize the vision of study program (Presidential Decree 8/2012, KKNI; BSNP, SIPT 2010; SK Mendiknas 45 / U / 2002). Analysis of the learning objectives will determine the exact form of knowledge, skills, and attitudes that are expected as a result of learning (Moore, 2005; Reigeluth & Merrill, 1978). Referring to this objective, the project-based learning entrepreneurial emphasis on internalizing the knowledge, skills and attitude formation, so that this objective is likely to lead to the goal orientation and supporting procedural prerequisites of

procedural steps in carrying out the activities in sequence (Bloom, 1979; Gagne, 1977 ; Degeng, 2013).

Results of Design and Prototype Development

Materials used to construct the design of entrepreneurial learning models, among others: (1) consider the background of the student's understanding of entrepreneurship; (2) the background of the implementation of the curriculum that has been implemented; (3) the students' needs and objectives of economic education courses; (4) conditions of learning behavior of students in the learning process;(5) design using reverse (*backward*) of Gagne et al. (1992) which sets the learning outcomes and formulate objectives, instructional procedures, and evaluation of learning. Results of design development and prototype-based learner's entrepreneurial project is as follows.

Learning objectives include (1) the purpose of the course is to give new insight into the entrepreneurial potential of students; (2) competency standards to be achieved is the students are able to have an entrepreneurial spirit; (3) the basic competencies to be achieved is the ability of students to explain the role and importance of entrepreneurship education, develop imagination to become an entrepreneur, have the motivation to develop entrepreneurship, describes the characteristics of entrepreneurs, discover and develop their business ideas, making business planning for business baaru, and entrepreneurial practice; (4) the subject matter in entrepreneurial learning consisting of the role and importance of entrepreneurial education, build entrepreneurship dreams, develop entrepreneurship motivation, entrepreneurial characteristics, find and develop business ideas, business planning, and business implementation.

Learning methods applied include the division of the working group of students who are determined based on the student's learning style (*learning style inventory*) were adopted from Kolb and McCarty (1984) and project-based learning entrepreneurship adopted from The George Lucas Educational Foundation (2005). Assessment is based on the process and results of entrepreneurial learning (and product portfolio).

Preliminary results of Trial Products

Initial product trials consisted of expert validation test education, entrepreneurship, and limited test. The test results of expert validation and limited test are shown in the following table.

Table 1. Test Results Validation and Test Expert Limited

Commentary	Education experts	Entrepreneurship experts	Test Limited
Content / Content	Good	Good	Good
Changable	Pretty good	Good	Good
Linguistics	Good	Very good	Very good

Source: questionnaire assessment of entrepreneurial learning package

The next step after the initial product improvements is to perform prototype testing and refinement of entrepreneurial learning package.

Trial Final Results

1. Profile of test class models

Experiential learning (Kolb, 1984) is a cycle that must be passed to determine the student's learning style. Learning styles used in this study is a learning style akomodator and asimilator. Assessment of student learning styles are akomodator and asimilator have relevance to the project-based learning entrepreneurship. Akomodator learning style assessment can be used to assess the learning styles of students who are only able to adopt an existing product (limited to product innovation techniques). While asimilator learning styles can be used to assess student learning styles were able to find new ideas so as to produce a product that is completely new. Results of the assessment of learning styles 36 students showed that most of the students have learning styles akomodator. While students who have a learning style asimilator many as 6 people. Of assessment of student learning styles and the application of project-based learning entrepreneurship can foster the entrepreneurial spirit of students which consists of *self-directed, self-nurturing, action-oriented, higly-energetic, and tolerant of uncertainty*. Learning styles of the students have relevance to the entrepreneurial spirit of students who demonstrated on the two dimensions of learning developed by Kolb (1984) ie *perceiving information* and *processing information*. The information obtained and processed will produce a concrete action so the impact on the discipline, confidence, desire to attain goals, have high energy to work hard, and be ready with all the risks that would be faced.

2. Assessment and product portfolio

The products produced by the working group of students already have compatibility with the student's learning style. Akomodator learning style shown by the ability to innovate existing products that rare steak, chips pumpkin flavors, gethuk mlintir, patchwork and ribbon brooch, bananas blankets cheese, chicken katsu, fan krispy banana, ice moya fruit, crackers snails, and ice Cimut salad. While learning style asimilator indicated by the ability to find new ideas and produce a product that is completely new is pis la fitting (food products with raw materials made from bananas and cassava) and aister mushroom gel (beverage products with oyster mushroom base material that is processed into order -agar. The result of a portfolio assessment showed as many as 16 students or as much as 44.44% have a very good learning value (the average value of a portfolio of 81-100), and 20 people or 55.56% have learned a good value (average value -rata portfolio of 66-80.) Thus it can be concluded that the implementation of project-based learning entrepreneurship adopted from The George Lucas Educational Foundation (2005) and supported by the determination of a student's learning style (Kolb, 1984) demonstrates the ability of students to determine, plan, and implement selected projects, so the end result of this study has been in line with expectations.

3. The spirit of entrepreneurship

Entrepreneurial spirit of student assessment based on the results of assessment questionnaires and interviews about the entrepreneurial spirit entrepreneurial experience when following a project-based entrepreneurial pembelajaran. Of the 36 students who have followed the project-based learning entrepreneurship has had an entrepreneurial spirit (*spirit of entrepreneur*) was good. This is evident from the assessment questionnaire given that it amounted to 51.9% of the students were able to find and develop a business idea, 41.7% of the students are able to establish good cooperation, 65.28% of students have a good business risk management, 65.74 % of students have a business analysis both internally and externally, 41.67% of students have properties of hard work and self-confidence, 52.78% of the students were able to innovate and create products that are creative, and 52.78% of the students have good leadership. Based on the results of the assessment it can be concluded that students who already take a course in entrepreneurship-based

projects have a good entrepreneurial spirit. They are able to have and apply the characteristics of entrepreneurial attitudes and behaviors of successful (Zimmerer, 2002; Cashmere, 2007; Nickels, 2005; Lambing & Kuehl, 2002).

4. The effectiveness of entrepreneurial learning based projects to foster the entrepreneurial spirit of students

Based on the application of project-based learning entrepreneurship, the small groups of students working in accordance with the student's learning style, portfolio assessment and the resulting product has been able to foster an entrepreneurial spirit with a very good student.

Coefficients ^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	24.043	21.993		1.093	.282
Entrepreneurship Project-Based Learning	.574	.278	.334	2.067	.046

Dependent Variable:
Entrepreneurial spirit

In tests conducted also showed statistical probability value of 0.046 < 0.05, which means project-based learning entrepreneurship can foster the entrepreneurial spirit of students. Thus, the implementation of project-based entrepreneurship education is a strategy and appropriate teaching methods to improve student entrepreneurship intentions. With the intention of increasing entrepreneurship in students, the entrepreneurial spirit of students will grow and it will automatically change the mindset (*mindset*) student of job seekers into job creators.

5. Revision End Products

Revision of the final product is done for the improvement of entrepreneurial learning package includes (1) entrepreneurial teaching materials are separated from the student worksheets; (2) pieces of student work as the result of a portfolio of student records; (3) guide the implementation of learning is more focused on the planning and implementation of the learning process, as well as the assessment of learning outcomes; (4) The faculty is equipped with guide lecturer as signposts in menerapkan entrepreneurial project-based learning.

CONCLUSION

Results of the study includes four (4) following. (1) Initial identification showed that the model of entrepreneurial learning not to balance theory and practice, partial, and learning models has not been steady. Through this research has been structured learning model by applying DBR development that balances theory and practice, a comprehensive practical and applicable; (2) Test validation by experts of education and entrepreneurship, and the test is limited by the respondents indicate that the objectives, content and learning offerings views of content and typographical arrangement is good, while the views of the typographical arrangement as very good; (3) Test the final product showed that the majority of the student's learning style akomodator classified. Results of student portfolio assessment mostly quite good. The resulting product has a working group of students according to their learning style. Effectiveness test showed entrepreneurial project-based learning has been able to foster an entrepreneurial spirit with a very good student; (4) Revision of the final product is done in part: (a) teaching materials that separate the material with worksheets students; (B) instructions on the implementation of learning is the emphasis on the planning and implementation processes, as well as the assessment of learning outcomes; (C) prepared as a guide lecturer signs the application of learning.

SUGGESTION

Suggestions utilization of the products produced are: (1) faculty can utilize as a reference of learning to improve the quality of entrepreneurial learning so as to obtain a good learning outcomes; (2) be applicable in the teaching and learning activities to foster the entrepreneurial spirit of students; (3) the application of the economic education courses to realize the advantages of the course so as to achieve the expected competitive advantage; and (4) can be used as a reference for future research.

REFERENCES

- Aghajani, H., & Abbasqholipour, M. 2012. *Explanation of Relationships between Biographical Characteristics and Entrepreneurship Spirit of Students*. Iranian Journal of Management Studies (IJMS). Vol 5, No. 1, January 2012. Pp. 63-78.

- Bloom, BS 1979. *Taxonomy of Educational Objectives: Book1. Cognitive Domain*. Landon: Longman Group Limited.
- BSNP 2010 (Content Standard of Higher Education)
- Clouse, RW, Aniello, J., & Biernaeki, J. 2005. *A Problem-Based Learning Environment for Entrepreneurship Engineering*. Proceedings of the 2005 American Society for Engineering Education Annual Conference & Exposition.
- Collins. 1992. *Toward a Design Science of Education*. In E. Scanion & T. O'shea (Eds). *New Direction in Educational Technology* (pp. 15-22). New York: Springer-Verlag.
- Cord. 2001 *Contextual Learning Resource*. Available at: <http://www.cord.org/lev2.cfm/65>. Accessed date: March 2, 2001.
- Degeng, 2013. *INS Science Learning: Classification Variables To Development Theory and Research*. Aras Media.
- Edwards, LJ & Muir, EJ 2005. *Promoting Entrepreneurship at The University of Glamorgan Through Formal and Informal Learning*. *Journal of Small Business and Enterprise Development*; 12, 4; ABI / INFORM Global, pg. 613.
- Ekpoh, UI, and Edet, AO 2011. *Entrepreneurship Education and Career Intentions of Testiary Education Student in Akwa Ibom and Cross River states, Nigeria*. *International Education Studies*, Vol 4, No.1; February 2011.
- Fitriati, Rachma. 2011. *Entrepreneurship Education: Toward Several Models in Indonesia's University*. Proceedings of the 4th International Conference on Indonesia Studies: "Unity, Diversity and Future".
- Gaer. 1998. *Whats is Project-Based Learning?* <http://members.aol.com> , accessed on September 7, 2013.
- Gagne, RM 1977. *The Conditions of Learning* (4th ed). New York: Holt, Rinehart, and Winston, Inc.
- Gagne, RM, & Briggs, LJ, & Wager.WW 1992. *Principles of Instruction Design*. New York: Holt, Rinehart and Winstone.
- Kasmir. 2007. *Entrepreneurship*. Jakarta: PT Raja Grafindo.
- Khan, SA 2007-2008. *Entrepreneurship Education in Pakistani Universities*. University of Essex Southend-on-Sea, School of Entrepreneurship and Business.
- Kolb, DA 1984. *Learning Style Inventory Inventory Self Scoring and Interpretation Buuklt*. Boston, NA: McBer and Company.

- Kolb, DA & McCharty. 1984. *GNVQ 7 Learning Style Inventory (adapted Kolb and McCharty)*. [http:// search? q = Kolb + mccharty & btnG = & client .](http://search?q=Kolb+mccharty&btnG=&client=), accessed on January 12, 2013.
- Lambing, PA & Kuehl, CR 2002. *Entrepreneurship*. Second Edition. New Jersey: Prentice Hall.
- Lee, SM, Chang, D., & Lim, SB 2005. *The Impact of Entrepreneurship Education: A Comparative Study of the US and Korea*. International Entrepreneurship and Management Journal I, 27-43, 2005. Springer Science + Business Media, Inc. Manufactured in the United States.
- Moore. *Instructional Strategies efective 2005. From Theory to Practice*. London New Delhi: Sage Publications.
- Moursund, DG 1997. *The feture of Information Technology in Education*. <http://darkwing.uoregon.edu/~moursund/books/futuresbook1997/index.html> . accessed on January 1, 2013.
- Nickels, WG 2005. *Understanding Business*. New York: McGraw-Hill.
- Presidential Decree No. 8/2012 (Indonesian National Qualifications Framework).
- Reevers, TC 2006. *Design Research from a Technology Perspective*. In JVD Akker, K. Gravemeijer, S. McKenney, & N.Nieveen (Eds), *Educational Design Research*. P. 52-66. London: Routledge.
- Reigeluth, CM & Meriill, MD 1978. *A Knowladge Base for Improving Methods of Instructional Oue*. Educational Psychologist, 13: 57-70.
- Sarjono, et al. 2012. *Evaluation Results of Entrepreneurial Studies Program*. Teachers' Training College, Bojonegoro. Not Published.
- Susilo, WH 2014. *An Entrepreneurial Mindset and factors Effect on Entrepreneurs Spirit in Indonesian*. The SIJ Transactions on Industrial, Financial and Business Management (IFBM), Vol. 2, No. 4, June 2014.
- The George Lucas Educational *Foundation*. 2005. *Instructional Module Project Based Learning*. <http://www.edutopia.org/modules/PBL/whatpbl.php>., accessed on January 21, 2012.
- Thomas, JW 2000. *A Review of Research on Project Based Learning*. <http://www.autodesk.com/> , accessed on 18 July 2013.
- Ward. 2012. *Effect of Entrepreneurship Education and Characteristics of the Student Entrepreneur Of Intention In Colleges in Jakarta*. National Seminar on Entrepreneurship and Business Innovation II.Jakarta: University Tarumanegara, September 18 of 2012.
- Zimmerer, TW, and Scarbourg, Norman, M. 2002. *Introduction to Entrepreneurship and Small Business Management*. Interpreting Yanto Sidik Pratikno and Edina Cahyaningsih Tarmidzi. Issue 2. Jakarta: Prenhallindo.