

# Development of KKNI-Based Entrepreneurship Learning Model

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**Abstract**—Research Aims Learning System Development of Entrepreneurship for Higher Education. Problems of entrepreneurial learning, such as: low entrepreneurial motivation, difficult to develop business ideas, not running feasibility studies, weakness of grand design and low start up entrepreneurial business. The research method used is: development of model entrepreneurship instructional design at university, by doing design analysis of ADDIE learning design (analysis, design, development, implementation and evaluation). The design is done in terms of curriculum planning, SAP, GBPP, Syllabus, Guidebook and Course Module. In terms of systems do SDLC Development and design OOAD, among others: use case, class, activity, and design UID. The results of the study are the Development of Entrepreneurial Learning System as well as the Design of multimedia standard KKNI Based. The continuation of the research is to development the system implementation and Evaluation of Multimedia standard KKNI Based Entrepreneurial Learning System Design.

**Keywords**—development of learning system; entrepreneurship; addie; sdlc; ooad

## I. INTRODUCTION

Entrepreneurs are souls who have the courage to try to work on their own or control other people to utilize the resources owned to be a useful product and has a sale value. Entrepreneurs are also called entrepreneurs. In English, entrepreneur is called entrepreneur.

The success of the nation is when the entrepreneurial mental that succeeded in pushing the economy of a nation. Of the total, the entrepreneurial population in Indonesia only reached 1.65% of the total population. This amount is still very small compared to Malaysia, Thailand and Singapore which is over 4%. Based on data of 5 countries in 2020 population exposure in the World: 1) China: 1.303.723.332, 2) India: 1.656.563.632, 3) United States = 430.010.253, Indonesia = 313.020.047. By looking at the development of the population, the area of 1.905 million km<sup>2</sup>, if combined with entrepreneurship is a potential to improve the development of Indonesia in the business development.

Entrepreneurial Problems: 1). Management's Inadequacy, 2). Insufficient experience, 3). Inadequate Financial Control, 4). Failing to Develop Strategic Planning, 5). Uncontrolled

growth, 6). Bad location, 7). Poorly controlled inventory, 8). Inability to create entrepreneurial transition. The problem of entrepreneurship learning is triggered by the low achievement of entrepreneurial learning; the learning model is not relevant in improving the quality of students' knowledge and skills, the instructional design model has not been effective toward the achievement of student learning.

The roles of universities are: (i). Internalization of entrepreneurial values, (ii). Improvement of skills (transfer knowledge) in aspects of marketing, finance, and technology; and (iii). Entrepreneurial support (business setup) [16].

Some of the learning models in addressing entrepreneurial issues are described as follows:

- According to Mohammad Maskan: Portfolio-based Entrepreneurship Learning Model can improve attitudes and competence of entrepreneurship SMK students. This learning model uses an active student approach, multiple teaching methods and multiple learning resources. However, when viewed from the academic ability of students, it turns out that portfolio-based entrepreneurship learning model will result optimally if applied to students [11]
- Kwu-Kop learning model (Koperasi Entrepreneur Based) according to [13] can grow entrepreneurship skills of vocational students. Cooperative schools can provide benefits for students are: 1). Can be used as a means of learning to organize, run business for the welfare of members; 2). Meet all the needs of learning tools; 3). Establish a good, disciplined and honest mental attitude among students; 4). Train students to save; 5). Obtain the remaining portion of business proceeds (sisa hasil usaha - SHU); 6). Train the entrepreneurial spirit among students; 7). Grow students' competence on understanding the attitude and skills of cooperatives for the provision of living in the community; 8). For the board gives experience to lead and control the organization and business.
- Development of Learning Model of Entrepreneurship Education Project to Improve Attitudes, Interest, Entrepreneurial Behavior, and Student Learning Achievement of SMK, according to Endang Mulyani

The result of this research shows: (1). Availability of hypothetical model of project-based learning on entrepreneurship education appropriate for use in SMK; and (2). The model applied in the experimental class is more effective for improving entrepreneurial attitudes, entrepreneurship interests, and learning achievement, but in terms of improving the entrepreneurial behavior model applied in the control and experimental groups does not differ in effectiveness [12].

- Development of Multimedia-based project management in Higher Education on Ganesha University of Education, according to Kundang et al [10]. Developing research of multimedia-based project management system. With the support of multimedia is expected to increase student competence in improving learning in

Higher Education, improve student productivity in project management learning, development of learning system design can improve the quality of learning.

From some of the above research, the researcher proposed the title "Development Instructional Model of Entrepreneurship KKNi bases

## II. METHOD

The development research procedures [7] are well known in the Instructional design model using System Approach Model design concepts (Walter Dick, Lou Carey, and James Carey). The research steps taken in this research are based on the implementation of the attributes of the learning system design model by Dick and Carey.

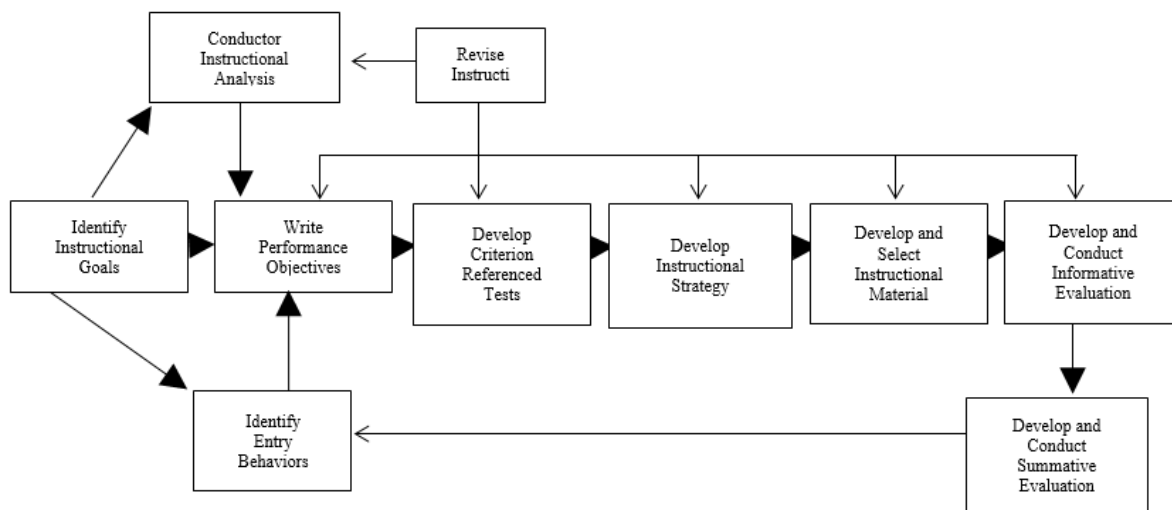


Fig. 1. Dick and carey system approach model.

The steps of research development according to [4], as follows:

1. Instructional goal,
2. Instructional analysis,
3. Entry Behaviors and Learner Characteristics,
4. Performance Objectives,
5. Criterion-Referenced Test Items,
6. Instructional Strategy,
7. Instructional Materials,
8. Formative Evaluation,
9. Revise the instructional program,
10. Summative Evaluation

Research refers to the research model of development [7], model of development of [5]. In the entrepreneurial development multimedia base, using multimedia software development steps:

1. Perform needs analysis,
2. Do learning design,
3. Multimedia production,
4. Validate, evaluate and revise the model,
5. Test the learning product.

In this research, the model of learning design of entrepreneurship course is combined with the design model of learning information system (planning, analysis, design, implementation and evaluation) and furthermore the next research of multimedia production. So the embodiment as follows at Fig. 2. Detailed Instructional System Development Multimedia Base.

## III. ANALYSIS AND DISCUSSION

The development of Entrepreneurship Instructional in Management Program Faculty of Economics and Business is conducted through several steps, among others:

A. Analysis

Analyze of learning KKNI-based according to students' learning needs by identifying student learning achievement. In formulating the Formulation of General Learning Objectives of Economics Management Studies Program Faculty of Economics and Business Esa Unggul University, which is description of generic KKNI for level 6, SWOT analysis, and tracer study. Based on inputs to these three matters, the Management Studies Program specifies the specific description of the study program, namely:

TABLE I. GENERIC DESCRIPTION FACULTY OF ECONOMIC AND BUSINESS

CODE	GENERIC DESCRIPTION	ASPECT OF WORK
A	Able to design, manage, create, read opportunities and business communications in solving problems and able to adapt to the situation at hand	Aspect of Wor
B	Mastering the theoretical concepts of a particular field of knowledge in general and the concepts of specialized theory in the field of knowlegde in depth and able to transform the problem procedurally	Aspect of Science
c	Have the best international knowledge, Language Communication, profesional and business ethics based on information, data and decision analysis using information	Aspect of Managerial
D	Being open and able to adjust, the ability to develop personality and explore the phenomenon of business environment change for the achievement of organizational work	Aspect of Attitude and Character

1) Learning ourcome economic management study program: Learning Outcome of management economics program based on generic and specific descriptions as well as each graduate profile Management Economics Program Faculty of Economi and Business Esa Unggul University as: Manager, Scientist, and Entrepreneur. Management Economic Studies program achieves the learning achievements of graduates of Management Studies Program, namely: 1) Job Aspects, 2) Scientific aspect, 3) Managerial Aspects, 4) Aspects of Attitude and Character.

Development The institutional curriculum is a number of study materials and lectures which are part and curriculum of higher education, have additional and science groups in the core curriculum are prepared by taking into account the circumstances and environmental needs and characteristics of the University Esa Unggul concerned. Entrepreneurship course is one of the courses in the curriculum planning of economics and business faculty.

a) Instructional goal: Based on generic descriptions and Identifying Research Profile of Esa Unggul University :

- General Data: Explanation of study program in terms of background, vision, mission and purpose, state of lecturer, student, curriculum and learning, constraints

and efforts to improve the quality of learning described in detail,

- Lecturers: qualifications that still need to be improved ability in: preparation of learning planning, implementation of learning, learning evaluation both: formative and sumatif,
- In the identification of the competency of Study Program of Management Economics on Faculty Economics & Business by using the standard design of KKNI-based curriculum competency with the following steps: 1) Seeing at generic descriptions (Indonesian National Qualification Framework - KKNI), 2) Conducting curriculum analysis (SWOT, Porter, Tracer Study), 3) Vision, Mission, Objectives of Study Program, 4) Determining learning achievement (composing learning strategy and learning evaluation, 5) Established curriculum structure .. Based on study and analysis of instructional instruction data or general competence or achieve general learning in entrepreneurship economics management courses.

TABLE II. GENERAL INSTRUCTIONAL OBJECTIVES

No	Achievement of General Learning
1	Enterpreneur Motivation
2	Generating ideas for activities, viable business opportunities
3	Feasibility Study and Business Situation Analysis Understanding the Market
4	Determining The Target Markeeting
5	Grand Design
6	Start-Up Business.

b) Instructional analysis: Analysis of learning done after completing the analysis of general competence objectives or general learning achievement, Instructional analysis The product of the instructional analysis process is a learning map.

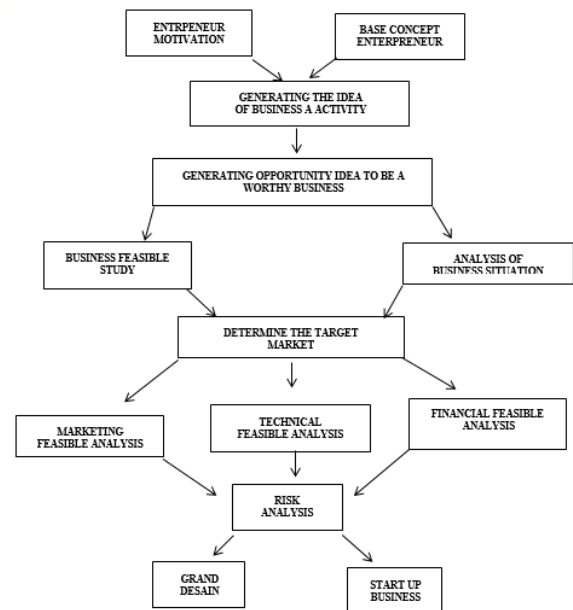


Fig. 2. Dick and carey system approach model.

*c) Entry behaviors and learner characteristics:* Student respondents semester five, prerequisite courses taken are: subjects of business motivation, microeconomics, macroeconomics, basic accounting. Characteristics of learning are processed, among others: cognitive abilities, affective, psychomotor, verbal information, learning styles, motivation to learn. Sample of respondents as many as 2 classes of respondents, namely group 1 = 50 students, graduated 38 students with graduation rate (76%) and group 2 = 55 students 35 students with graduation rate (63.63%), age range dominated 19-20 years, the majority of origin areas: DKI Jakarta and Tangerang, average monthly expenses: Rp. 1.500.000, -, average funding source = parent, residence with parent, last parent education = S1, average GPA group 1 = 3.30, group 2 = 3.05, majority of students have never follow and do entrepreneurial activities, have a high desire involved in entrepreneurship learning, as well as opening a business to meet the needs of life.

Through the cognitive abilities of all students it is more than agreeing to the use of entrepreneurship to build a business based on: entrepreneurial motivation, entrepreneurial basic concepts, generating ideas of business activities, generating ideas of opportunities into viable business, business feasibility studies, determining target market, market feasibility analysis, technical feasibility, financial feasibility analysis, risk concept, grand design, startup business.

The affective abilities of almost all students agree should students understand entrepreneurship, accept entrepreneurial learning, respond to entrepreneurial learning, respect others, accept entrepreneurial learning, motivated students learn entrepreneurship, learning process demands active students, enhances teamwork, improves student self-confidence, enhances ability discussion. In psychomotor almost all students agree should be able to use entrepreneurship development equipment, able to implement and use Entrepreneurship,

On the verbal skills of information: almost all students are more than agree should be able to interview software users, able to perform information communication skills, able to develop means of communication. In observation of learning style dominated by auditorial and visual students this indicates that students like to listen and visual, do not agree to have textbook, strongly agree to seriousness in entrepreneurship

learning, often ask lecturers, desire to do homework (home work) assigned lecturer, to the field of science studied, has an orientation in education, While the motivation to learn all the students almost more than agree to the lecturers who membelajarkan quality, subjects meet the qualification of industrial weight, using the method of learning is packed well, the condition of the lecture room that supports the lecture, although still not agree library.

*d) Performa Objectives:* Special instruction purpose, the implementation development Garis Besar Pedoman Pembelajaran (GBPP), SAP and Syslabus.

TABLE III. SPECIAL INSTRUCTIONAL PURPOSE

No	ACHIEVEMENTS OF SPECIFIC INSTRUCTIONAL	METHOD
1	Entrepreneurship Motivation	Lecture
2	Basic Concepts of Entrepreneurship	Game Seesion
3	Generating the Idea of Business Activities	Field Visit
4	Generating Opportunity Ideas to Be a Worthy Business	Discussion
5	Feasibility Study	Discussion
6	Business Situation Analysis	Field Visit
7	Set Target Market	Lecture
8	Market Feasibility Analysis	Lecture
9	Technic Feasibility Analysis	Lecture
10	Financial Feasibility Analysis	Lecture
11	Risc Concept	Discussion
12	Grand Design	Project
13	Start – up Business	Project

*B. Design*

Multimedia design was developed based on consideration of curriculum of Management Economics, Syllabus, outline of the learning program and lecture unit, and finally learning development for multimedia design model consisting of: (planning, analysis, design, implementation and evaluation). : 1) The design begins with the development of Curriculum of Economic Management Program Faculty of Economics and Business based on KKNi at Esa Unggul University, 2) Making lecture unit, 3) Making outline of the learning program, 4) Making Syllabus.

1) *Design:* Use case learning management system for entrepreneurship lectures

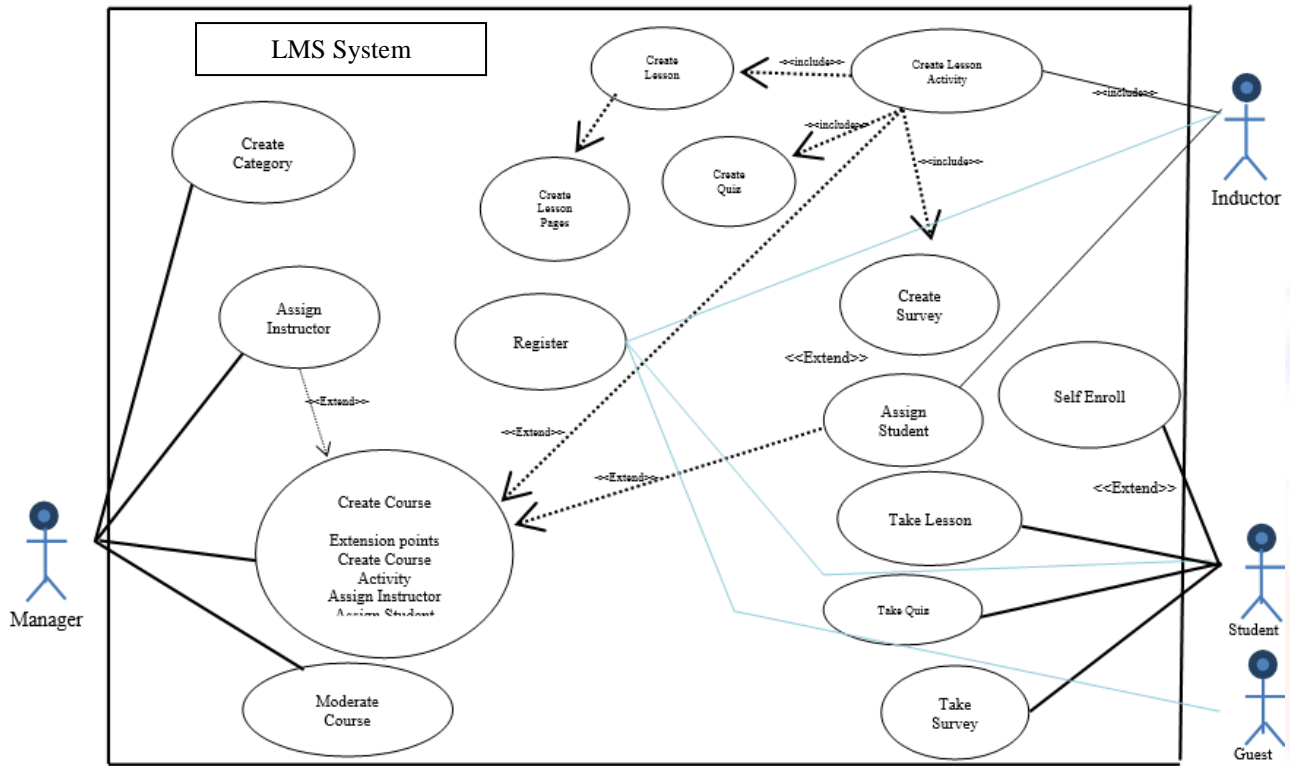
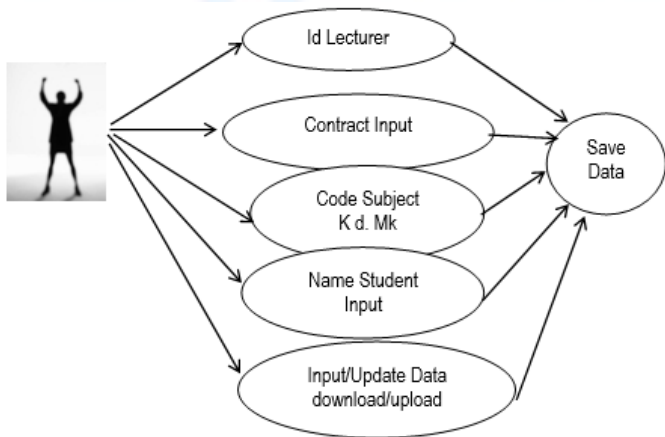


Fig. 3. Use case lecturer of entrepreneurship lectures.

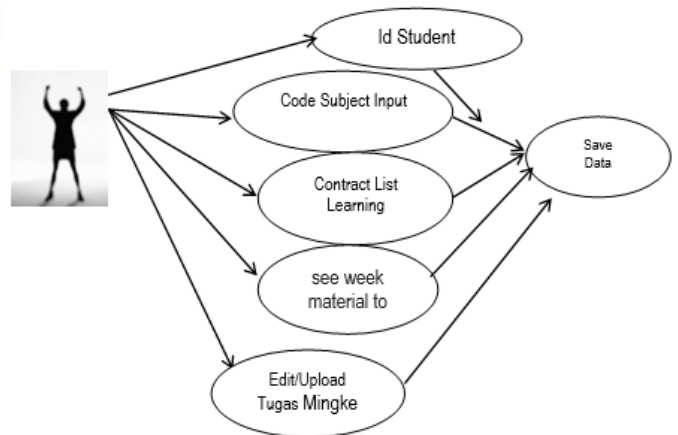
2) Use case lecturer.



Source: Researcher

Fig. 4. Use case lecturer contract of learning.

3) Use case student.



Sources: Researcher

Fig. 5. Use Case Student of Learning.

Next is the user interface design that can be seen [lms.esaunggul.ac.id](http://lms.esaunggul.ac.id).

4) Criterion – reference test items: In the course of the Entrepreneurship evaluation consisting of cognitive tests and

performance tests, the cognitive tests are divided into: objectives and essays. The objective test is used to measure the basic capabilities and concepts of Entrepreneurship, while the performance to measure students' ability in applying entrepreneurship concepts, performance tests produce student work in the form of design portfolio and entrepreneurship. In applying the portfolio use the attached.

5) *Instructional strategy*: The learning strategy cited Gagné's Nine Events of Instruction, allow : 1). Gain attention of the students, 2). Inform students of the objectives, 3). Stimulate recall of prior learning, 4). Present the content, 5). Provide learning guidance, 6). Elicit performance (practice), 7). Provide feedback, 8). Assess performance, 9). Enhance retention and transfer to the job.

6) *Instructional material*: In the development of teaching materials should include principles of relevance, consistency, and adequacy. Development of teaching materials is used to support facial lectures and self-study. In developing and selecting learning materials used to support entrepreneurship courses. Various teaching materials that can be used for learning needs include: 1). Text, 2). Audio, 3). Visual, 4). Animation, 5). Video, 6). Multimedia and, 7). learning management system. Learning process is done by blended.

7) *Formative evaluation*: Dick and Carey formative evaluation: 1). 1 to 1 evaluation (designer and learner - it's about the learner), 2). Small (focus) group evaluation (about the instruction), 3). Field Trial (instructor and group).

#### IV. CONCLUSION

- The design of the learning design generates the generic description of FE Management, the achievement of general instructional, the achievement of special instructional.
- Implementing entrepreneurship learning system based on KKNI, for the needs of management economics study program at Esa Unggul University.
- Evaluation entrepreneurship learning system based on KKNI, for the needs of management economics study program at Esa Unggul University.
- Produce KKNI-based Entrepreneurship Curriculum, GBPP, SAP, Module Lecture Entrepreneurship Courses for Program Economics Management Faculty of Economics and Business.

- Implementation Learning Management System Program Economics Management with Entrepreneurship courses.
- Designing Entrepreneurship Learning Program Economics Management Faculty of Economics and Business.

#### REFERENCES

- [1] ASHE Higher Education Report – All Issues – Wiley Online Library
- [2] Biggs, John, Tang, and Catherine, Teaching For Quality Learning At University, (UK): McGraw-Hill Education, 1 Sep 2011, pp. 389.
- [3] Curriculum Design Study Program Economic Management, Faculty of Economics and Business, 2017.
- [4] Dick and Carey, The Systematic Design of Instruction, 6th Edition, Allyn and Bacon, 2006.
- [5] Dick and Carey, "Lesson 10 Formative Evaluation" [Online], Retrieved from: <http://people.ucalgary.ca/~ekowch/673/mar20/formsum.html>, Accessed 7 juli 2017.
- [6] R. Karban, Plant Learning and Memory. In: Plant Sensing and Communication, Chicago and London: The University of Chicago Press, 2015, pp. 31-44.
- [7] G.D. Meredith, G.P. Joyce and B. R. Walter, Educational Research, an Introduction Seven Edition, Allyn and Bacon, 2007.
- [8] Gagné's Nine Events of Instruction [Online], Retrieved from: [https://www.niu.edu/facdev/pdf/guide/learning/gagnes\\_nine\\_events\\_instruction.pdf](https://www.niu.edu/facdev/pdf/guide/learning/gagnes_nine_events_instruction.pdf), Accessed 29 September 2017.
- [9] K. Wijaya, "Analysis of Development of Entrepreneurship Learning Model", Jurnal : Pelangi Pendidikan, vol. 22, 2015.
- [10] K. Kundang, D. I. Joko and I. Bambang, "Development of Multimedia Based Project Management on Higher Education, Jurnal Nasional Pendidikan Teknik Informatika (JANAPATI), vol. 5(1), 2016.
- [11] M. Maskan, Development of Portfolio-Based Entrepreneurship Learning Model To Increase Attitudes and Competencies of Entrepreneurship Students SMK (SMEA) in Malang, Unpublished.
- [12] M. Endang, Development of Learning Model of Entrepreneurship Education Project to Improve Attitudes, Interest, Entrepreneurial Behavior, and Student Achievement of Vocational School Students, Cakrawala Pendidikan, Unpublished.
- [13] I. Nurbudiyani, "Entrepreneurship Learning Model with School Cooperative Media in SMK, Business and Management Group," Jurnal Pendidikan Vokasi, vol 3(1), pp. 53-67, 2013.
- [14] E.S. Smaldino, D.J. Rusell, R. Heinich, and M. Molenda, Instructional Media and Technology for Learning, 6th ed., Canada: Pearson College Div, pp .27.
- [15] Suryana, Entrepreneurship Practical Guidelines: Tips and Processes Towards Success, Bandung: PT Salemba Empat, 2006
- [16] V. Carlo and S. Christian, "Consistencies Management and Enterpreneurial Success", Oxford Business and Economics Conference, June 24-26, 2007.