

INNOVATION IN CONDUCTING SKILL LEARNING OF STUDENTS CHARACTER DEVELOPMENT IN VOCATIONAL HIGH SCHOOLS

Riana T.Mangesa

Electrical Education Engineering Department
Makassar State University, Makassar, Indonesia
rianamangesa@yahoo.com

ABSTRACT

One of several results through Research & Development in development of competence based learning integrated with character education is the development of learning process planning (*Rencana Pelaksanaan Pembelajaran/RPP*). Several activities contained in *RPP* is learning processes which aim to reach all competence indicators for each subject.

To integrate characteristic values into skill learning in vocational high school based technology, it is necessary to have analytical ability and new phenomenon planning in skill learning which based on workplace competence. Through innovation in learning, all learning methods can make both students and teacher activities becoming more active, creative and joyful especially if they use technology media in conducting learning process.

In relation with all activities in learning that allow students to build characteristic values into knowledge, construct clear, critical and good direction meaning, it is important to have innovation in *RPP*. Learning as one of mentality activity which carried out with active interaction with surrounding environment will produce permanent and remain change in knowledge, skill, values and attitudes.

Keywords: RPP development, learning innovation, characteristics education in Vocational High Schools

I. INTRODUCTION

The quality of education is closely associated with education programs on learning, curriculum and teaching staff, infrastructure, supporting even more. Based on the success of a curriculum theory, as a whole requires along process, starting from the study and analysis of various ideas and concepts about education, curriculum development, preparation and assignment of staff, even to systems including the assessment of learning. Some experts argue that the value of a curriculum is determined by its ability to provide educational services, to encourage students to achieve learning objectives

Curriculum as the direction, purpose and philosophical foundation of education, the curriculum should be developed in accordance with the dynamic progress of science and technology (IPTEK). This requires the implementation of curriculum 2013 according to the progress of IPTEK, to the purpose of the task achieved vocational

education in preparing students competence and have the character.

According to the Minister of Education and Culture that through the implementation of curriculum policy in 2013, will produce Indonesian people are creative, innovative, integrated reinforcement affective attitudes, skills and knowledge. So the development of curriculum 2013 is expected to overcome the weaknesses that exist in the previous curriculum.

In 2013 a complete normative curriculum development based on the laws and regulations of Indonesian. 20 year 2003 on the national education system and the Regulation no. 32 in 2013 and no. 66 of 2013 concerning competency standards elementary and secondary education, complete with educational assessment standards.

Function of education in vocational high schools (SMK) in accordance with Regulation 17/2010 article 76 is to equip students in the ability of science and technology, as well as vocational

skills according to the needs of society, the phenomenon requires a new learning program to achieve a passing grade on the attitude domain, knowledge and skills.

Benjamin S. Bloom (1956) stated that the concept of development of competency standard are based on the principles of learning which consists of three domains, namely cognitive learning (knowledge, comprehension and application), affective (attitudes, values and appreciation) and psychomotor (all behavior skills related to the ability for person).

Based on the statement Supriya, (2002:295) that vocational students are required to have flexible skills that enable to enter a variety of jobs, both in the industrialized world require diverse capabilities, which must be contained in the standards of competence to get the job done. Therefore learning in vocational skills related to competence, the spectrum is divided into several Competence Standard and Basic Competence (SKKD).

Vocational education that prepares graduates for employment and independent power ready on the field, in fact, can not be realized. It seems that the problems in some vocational caused by weak education system and because of the Tauran among students, which adversely affects the competence and lack of character values of the students. The problems associated with the learning system by mastery of skills as required competencies of the workforce and the lack of learning devices, encouraging the importance of changes in the learning system. Because it is in the implementation of the curriculum in 2013 required the development of lesson plans for each basic competency achievement and the ability of teachers to plan the implementation of learning in SKKD.

II. Concept Development Lesson Plan

According to Dick and Carey (2005 : 1) to carry out effective learning , the learning system should approach that is logical and repeatable process that can be used to improve and enhance the quality of learning programs . Therefore, in planning the implementation of learning (RPP) begins with the preparation of lesson plans and plan evaluation (assessment) . The intent and purpose of the preparation of lesson plans in order to create activities that support the primary goal of helping students learn the right , because students learn best when teachers prepare lesson plans well .

Efforts to improve the quality of learning in vocational, competency -based learning system integrated character values can be applied in practice learning program with the development of science and technology progress. Thus, in implementing the curriculum in 2013, the implementation of learning objectives directed at achieving competence with the values of the characters in each indicator of competence to be achieved. Through the development of lesson plans by integrating the spiritual attitudes, social attitudes, knowledge, and skills according to Permendikbud No. 54/2013, which involves the world of work and industry as users vocational graduates .

Munthe, (2009: 32) gives firmness that competency indicators should be formulated with the operational verbs that can be measured and made instruments of assessment. Thus, in designing the competencies/learning objectives in accordance with the competency-based curriculum, there are three components that must be formulated: (1) the standard of competence, (2) basic competence, (3) indicators, the level can be seen in Figure 1 below:

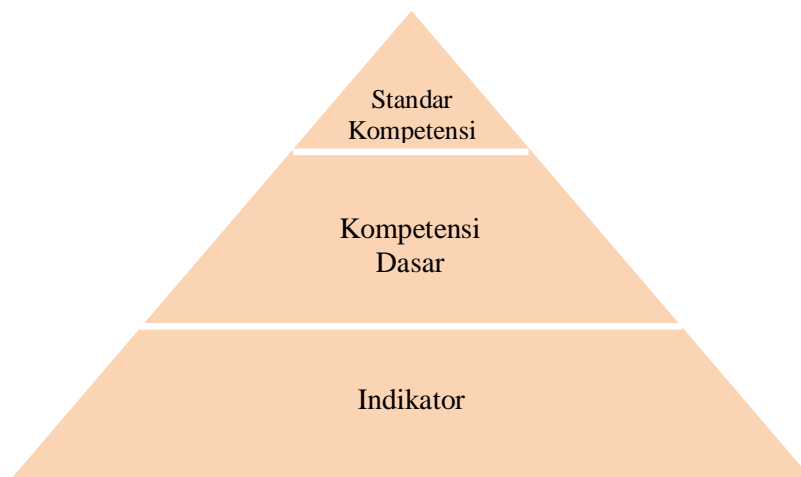


Figure1: Competence in Three Parts.

Figure 1 explains that in mastery of the competency standards specified by the mastery of basic competence and mastery evidenced by mastery of middle level indicator. Indicators are the basis of the specific competencies that can be used to determine the size of the achievement of learning outcomes.

The Regulation 23 of 2006 in connection with, concerning competence is defined as the ability to act, think and act consistently as an embodiment of knowledge, attitudes, skills of the students, the learning objectives are focused kepengembangan competence according to some experts; Sagala (2010); Benny (2009) is an activity of interaction with the environment, which is done to have competence in the form of skills and knowledge required.

According to the results of Thomas (2008) that students in following the practice learning should always wear work clothes and safety equipment, behave orderly, safe, courteous, polite, respectful, disciplined, understand all the rules and is responsible for machines and tools used. This gives the sense that vocational students should be prepared seriously to sharpen the character values that should appear in the learning system, in line with the competencies that are personal and social.

The changes that occur in connection with the implementation of learning phenomena in the field of electrical expertise in vocational deemed in adequate, then the purpose of this research

is to produce a device developed learning on lesson plan on learning the electrical installation practices. Innovation implementation of learning with the values of character that is tailored to the purpose of the indicators to be achieved, it is considered use effectively to achieve the learning objectives invocational technology.

The quality of learning is determined by the results of the evaluation that teachers can do. Teachers can evaluate the strength so weaknesses of students in learning. The more quality lesson plans and methods used in the learning process more robust for decision making in improving the learning process.

III. Research Methods

This type of research refers to the methods of research and development (R & D). Borg and Gall (1983: 772), made clear that's specialized in the field of education, Research & Developmental Model (R & D) is a process that can be used to develop and validate products in educational research. Learning device is part of the product developed, which is focused on the development of lesson plan electrical installation practices and assessment rubrics.

Stages of development of learning tools, adapting appropriate measures research and development proposed by Borg & Gall (1983) modified the following stages: (1) requirement analysis phase, (2) the design stage of learning, (3) the stage of

product development and(5) evaluation stage.

In accordance Research & Developmental stages of the model referenced in this study, it is at the stage of requirements analysis, to identify the competence of the work force in the electrical installation electricity through workshops, followed by a discussion with practitioners directly with some of the technical vocational school teachers in focus group discussions (FGD). Thus found competence profiles, in order to install electrical installation work which hexamined into outcomes: (a) basic competence (KD) and Blueprint competency matrix.

At this stage of product development, the development of learning activities on the instructional implementation of learning (RPP) are the values of the characters into each core activity goal achievement indicators corresponding to each meeting. The next stage, design the evaluation results with the design criteria of successful learning (Rubric assessment) ,

to evaluate the level of achievement indicators .

Analysis using qualitative descriptive analysis techniques that expose the product development of learning tools for the installation of subjects and assessment instruments. All instruments in the form of sheet validation, investigated the validity of the theoretical through expert assessment/experts (validators) according to their expertise.

The research instrument was developed using four Likert scales follows: The lowest score was given the number 1 and the highest score was given a score of 4 (Sugiyono, 2010:312). Grading scales expressed in every aspect of the assessment criteria on the instrument, are: (a) very well with the value of four; (b) either the value of the three; (c) fairly well with the value of two; (d) less well with the value one. Assessment interpreted into degrees of validity, by converting qualitative data into quantitative data, referring to the scores obtained were converted into scores on a scale of 4, modified as in Table 1 below:

Table1
Standard Conversion to Qualitative Data Quantitative Data

Mean Score	Criteria	Conclusion
$3,51 \leq M \leq 4,0$	Very Good	Can be used without revision
$2,51 \leq M < 3,5$	Good	Can be used with slight revisions
$1,51 \leq M < 2,5$	Enough	Can be used with many revisions
$0,0 \leq M < 1,5$	imperfective	Cannot be used

Description: M=mean score for each aspect assessed.

To measure the level of inter-rater agreement (inter-rater reliability) of the results of the assessment/validation of research instruments, analyzed by Cohen's Kappa statistic Coefficient of Nitko and Brokhart (2007:80). Reliability of the instruments said to be reliable if the coefficient (r) ≥ 0.70 . To calculate Kappa (K) using the following formula.

$$K = \frac{\Sigma a - \Sigma ef}{N - \Sigma ef}$$

Description:

Σa = the total number of agreements

Σef = the sum of the expected frequencies of agreement

IV. Results and Discussion

Conceptually through the analysis, development of learning tools can be used as feasible, because it has been qualified by rating validator kevalivan skilled in the art.

Based on the results of the development and review of the final product, then the conclusion becomes the findings in this study is, learning devices

that meet the criteria of valid and reliable. Products in the form, lesson plans and evaluation tools that have been developed according to the indicators of competence to be achieved.

The results showed that with the innovation of the lesson plan and evaluation, learning can be effective if formed interact in varying factual concepts and work processes. Through the internalization of the values of characters in the lesson plans, the achievement of competence indicators in the realm of knowledge, attitude and skills will form the character of students on honesty, rigor, discipline, responsibility and creativity .

Referring to the results of research and regulatory in 2013, then in an effort to improve learning outcomes, implementation of learning skills in desperate need of a teacher's ability to innovate RPP, so the redesign of learning with the goal of designing and implementing competency-based learning, in a manner characteristic of innovative contextual view

References

- Borg, W.R., & Gall, M.D. (1983). *Educational research: An Introduction* (4nd ed). New York: Longman. Inc.
- Bloom S.B., Krathwohl, D.R., Marsia, B.B. (1964). *Taxonomy of educational objectives*: New York: Longman.
- Dick, Walter & Carey, Lou., Carey, James O. (2001). *The systematic design of instruction* (5th ed). New York: Longman.
- Muklas, Samani. (2008). *Pengembangan dan peningkatan kualitas pembelajaran*. Jakarta: Direktorat Ketenagaan. DJPT. Depdiknas.
- Munthe, B. (2009). *Desain pembelajaran*. Yogyakarta : Pustaka Insan Madani
- Nitko, A.J., & Brookhart, S.M. (2007). *Educational assessment of students*. New Jersey: Pearson Merrill Prentice Hall
- Saifuddin Azwar. (2010). *Sikap manusia, teori dan pengukurannya*. Yogyakarta: Pustaka Pelajar.
- Sagala, S. (2010). *Konsep dan makna pembelajaran: Untuk membantu memecahkan problematika belajar dan mengajar*. Bandung: Alfabeta.
- Santrock, John, W. (2008). *Educational psychology and technology 2nd edition (terjemahan Tri Wibowo, BS)*. Texas: McGraw-Hill Company, Inc. (buku asli terbit tahun 2004)
- Sugiyono. (2010) *Metode Penelitian Pendidikan dan Pendekatan Kuantitatif, kualitatif dan R & D*. Bandung: Alfabeta
- Wina Sanjaya. (2008). *Strategi Pembelajaran; Berorientasi Standar Proses Pendidikan*. Jakarta: Kencana Prenada Media Group.
- Suharsimi Arikunto. (1990). *Manajemen pengajaran secara manusiawi*. Yogyakarta: PT Rhineka Cipta