The Development of Vocational Curriculum Implementation Evaluation Model

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Abstract— This study aims to produce a model for the evaluation of the curriculum implementation of Vocational School. The method used consists of literature study, survey, documentation studies and Delphi technique. The results of the study, completion of a vocational curriculum model of comprehensive evaluation on the dimensions of the planning and execution of curriculum implementation. Vocational Curriculum Implementation Evaluation model (VCIE/EIKK) is developed from the discrepancy evaluation model that aims to provide information to make the assessment and improvement of curriculum implementation considerations. The application is done by comparing the performance of the implementation of the standards in order to obtain the information gap on those aspects that are evaluated. EIKK model has advantages in practicality, flexibility, and accuracy of the evaluation findings. The EIKK model also has some limitations as it is designed to evaluate the components of the curriculum and for use on a single competence in vocational skills. EIKK model can serve as a model of self-evaluation, given the internal evaluators conducted an evaluation in vocational high school of Building Engineering.

Keywords—evaluation model; curriculum implementation; vocational

I. INTRODUCTION

There are some aspects that need to be considered by the organizers of vocational high school (SMK) of Building Engineering. First the draft curriculum is tailored to the demands of competence required by the industry and the development of construction technology. Second, the curriculum implementation process should be consistently implemented in accordance with the purpose and design of the structure of the curriculum and guidelines for the implementation of the curriculum. Third, efforts to improve and increase the quality of implementation of the curriculum should be designed as a continuous program.

Based on study vocational curriculum in Indonesia, which is initiated with the use of vocational curriculum with curriculum 1964 to 2013, the curriculum changes have not been able to answer the demands of business and industry, especially the competence of graduates. The exposure of academic paper about vocational curriculum policy study by the Centre of Curriculum, Ministry of Education (2007), confirms that there are problems regarding the implementation of vocational curriculum, including:

- Some teachers do not understand the school content standards, the substance and its implementation into the curriculum.
- The structure of the curriculum and learning load is still too full load.
- Inadequate teaching materials on aspects of quantity and quality.
- Syllabus and lesson plans have not been arranged based on the analysis of the needs of schools and local excellence.
- The learning process has not been executed in accordance with content standards, process standards and assessment standards.
- Some teachers have not implemented the scoring system as demanded by the Curriculum Base Competence.

Based on an analysis of the growing phenomenon and problems identified above, this study focuses on the study of the process in the form of implementation of curriculum development evaluation model. The emphasis is in line with the opinion of Hasting [1] stating that the evaluation of the curriculum should develop a focus on the process to be able to give an explanation "the why of outcomes".

II. RESEARCH METHODOLOGY

The method used in this study refers to the stages of research and development using the Delphi technique [2]. Its application makes adjustments to take into consideration the effectiveness in validating and testing the model in the field.

A. Preliminary Study Phase

The first stage begins with the study of literature and field studies in vocational areas of expertise Engineering Building. Literature study is intended to understand the discussion related to the theory of models of curriculum evaluation and vocational curriculum areas of Building Engineering. Field studies conducted with survey approach and descriptive study documentation that describes what the condition of the variables to be studied.

B. Planning Phase Model

The planning stage in the development model of Vocational Curriculum Implementation Evaluation (VCIE/EIKK) includes several activities, including:
• Determination of the EIKK model development goals
• Preparation of a concept EIKK model
• Preparation of an instrument EIKK modes
• Determination of processing techniques and data analysis
• Preparation of reporting formats result EIKK model
• Determination of the model EIKK vocational evaluator
• Determination of measures application EIKK model
• Determination of the respondents to validate the EIKK model.

C. Development Phase
The model development stage was carried out with a group of experts to validate the curriculum and vocational education as well as vocational education practitioners in the field of building engineering expertise. The development of the model is done by using the Delphi technique, the valuation techniques and consideration of expert (expert judgment) to validate the concept of the model. The use of the Delphi technique is done in two rounds, which is based on the results of the validation performed on lap two already obtained the agreement of the expert team of the concept model of EIKK. Then validate empirically by education practitioners on the charge indicator and item-item instrument EIKK models on the dimensions of planning and implementation of curriculum implementation.

Test models of vocational curriculum implementation evaluation carried out on some vocational high school areas of Building Engineering in West Java. The test is done to get an idea about the practicality and effectiveness of the model. The effectiveness of the model seen from the ease understood, used, processed, analyzed and interpreted the results are in accordance with the purpose of evaluating the implementation of the curriculum.

III. RESULTS AND DISCUSSION

A. Results EIKK Model Development

EIKK models were developed referring to the Law on National Education System No. 20 In 2003 the legal framework and the foundation curriculum which requires an evaluation of the construction and implementation of the curriculum at every educational unit [1].

Focus EIKK models aimed at evaluating the implementation of the curriculum with consideration of their vital role in achieving the goals of the curriculum. Additionally it is reinforced with the opinion of Hasting [1] which is more focused on the evaluation of the process and not the outcome.

Evaluation in the context of Ethics is an attempt to obtain accurate information regarding the performance of the design and implementation of curriculum implementation. Measures of performance show the level of achievement of the objectives for each component of the curriculum. Focus on the evaluation of the curriculum implementation process, interpreted as an attempt to obtain information to assess the performance and the gap to the standard.

EIKK development process operational discrepancy evaluation model is adopted, as a model concept EIKK as described in Figure 1. In EIKK models, the evaluation is done by comparing the performance with the implementation of a standard implementation of the curriculum in order to obtain the value of the gap. Based on the information gaps conducted this study on the implementation aspects of the curriculum that need to be repaired.

![Diagram of Curriculum Implementation Evaluation Model](image)

B. Discussion of Results

EIKK models were developed, derived from the concept of curriculum evaluation on the scope of the evaluation of the design, implementation and evaluation of curriculum evaluation. As noted above, that in this model is the development of research on the evaluation of the implementation process of the curriculum. Based on a study of some models of curriculum evaluation, the model EIKK selected evaluation model discrepancy (gap) developed by [3]. Evaluation gap Provus described as "... the difference between the performance and the standard of a discrepancy" [4].

In the discrepancy evaluation model, there are four components of steps including: (1) determine the standards, (2) determine the performance, (3) comparing performance with the standards, and (4) determine whether there is a gap between the performance standards. Determination of the standards in the development of EIKK models based on standards developed process BSNP [5].

Design models EIKK done through the study of literature, reference the results of the research, internet and field studies
to look at the curriculum documents and curriculum evaluation has been done by SMK Building Engineering. Broadly speaking, the concept of curriculum evaluation model includes an explanation of the definition, nature, rationale, criteria, objectives, functions, scope, characteristics, strategy implementation, data processing techniques, and standards used in the testing of the model concept EIKK. Validation is done by experts’ curriculum and vocational education by using the techniques of expert judgment and discussion. Based on the results of the validation concept models, there are some entries and corrections in the refinement of concepts and aspects of language on the concept EIKK models.

Then the explanation of the processing results of the questionnaire regarding the concept EIKK models, show the tendency of respondents expressed the opinion that the item is deemed already comprehensive completeness and readability of respondents stated that the concept of the model is clear. Furthermore, the respondents stated that the concept EIKK models easy to understand and the level of representation of the dimensions of planning and implementation, most respondents looked to represent. Lastly are the display concept EIKK models, more than half of the respondents stated is representative.

Instruments EIKK models, validated empirically by practitioners of vocational education in the field of building engineering. Validation is done to look at the suitability of aspects, indicators and items instruments EIKK models with documents and implementation of curriculum implemented in vocational high school of Building Engineering. Based on the evaluation statement items on the dimensions of implementation planning and execution, showing almost all respondents gave the assessment that the items are used in accordance with the implementation of the curriculum used SMK Building Engineering. Only to aspects of the preparation of the final task considering dispensed is not used anymore, and the term tool man said technicians equipped as their use in vocational technology and engineering.

With regard to the tendency of respondents’ opinions about the EIKK instrument models derived from the questionnaire showed items of instruments already comprehensive statement. EIKK models instrument readability level, stated the obvious and the language used in the instrument according to respondents is easy to understand. Then in the representation aspect dimensions are evaluated in a model instrument EIKK, respondents viewed to represent the overall dimensions of the planning and implementation of curriculum implementation. Lastly, judging from the overall appearance of the model instrument EIKK, respondent states are representative.

Validation results with respect to the validation of the concept model and empirical validation of the instrument, showing the model EIKK developed the concept of having a strong base and have compatibility with the curriculum and its implementation in vocational high school of Building Engineering.

Discussion of the application program in the process of filling, processing and analysis of data, models EIKK reflect the level of practicality and ease of generating data or information regarding the performance of the implementation of the curriculum and compared with the standard in order to obtain its value discrepancy.

1) Stages of Implementation EIKK Model

Implementation of the evaluation carried out by the internal evaluator with a view to better understand the condition evalun while controlling factor of subjectivity. Evaluation focuses on two dimensions of assessment, namely the implementation of curriculum design and implementation of curriculum implementation.

In the first dimension, the evaluator assesses the design implementation include questions relating to the availability and quality guidelines for the implementation of vocational high school curriculum of Building Engineering, syllabus, lesson plans for each subject productive, module / instructional materials for each subject productive practice guidelines in the workshop / studio picture / computer laboratory, industrial work practice guidelines, guidelines for the testing and certification. Data collection techniques using documentation study and implementation of the draft assessment instruments curriculum in vocational high school of building engineering.

In the second dimension, the evaluators assess the implementation of the curriculum implementation includes questions relating to the availability and quality of support for the implementation of the curriculum, the learning process theory by teachers productive, the process of learning by doing in the workshop / studio picture / computer laboratory, a learning process working practices of industrial, test competency and certification, enrichment and remedial learning, as well as the supervision of the learning process. Data collection techniques used documentation study, interviews with teachers / instructors, observation learning theory and practice and assessment instruments implementing vocational curriculum implementation in the field of building engineering.

The data has been collected and then processed and analyzed by comparing it with the criteria that have been determined where the result of information regarding the level of implementation of the curriculum that is used as well as information with respect to the gap (discrepancy) of the implementation of the curriculum expected (standard) and compare it with the performance of the implementation of the curriculum implemented (performance).

Based on the analysis of the findings (finding), then made the consideration (judgment) to perform repairs that must be done in the implementation of the curriculum in vocational high school of Building Engineering. Then the results are made in the form of a report submitted to the school and teachers to be followed for consideration improvement of the quality of the implementation of the curriculum in vocational high school of Building Engineering.

2) Excellence EIKK Model

Model evaluation of the implementation of the vocational curriculum (EIKK) in vocational high school of Building Engineering seen from the concept model of curriculum implementation and evaluation instruments have different characteristics and have advantages over other evaluation models. Here are some advantages EIKK models, namely:
a) Simplistic or the simplicity of the EIKK model
b) Relevance, the suitability of the model EIKK with curriculum implementation models implemented by vocational high school of Building Engineering
c) Systematic, namely keruntutan appropriate evaluation on the implementation of the evaluation system component dimensions of the planning and implementation stages.
d) Realistic and flexible, ie models designed EIKK by promoting the ease of adaptability in the evaluation and implementation tailored to the learning conditions.
e) The accuracy of the results EIKK, as a model adapted to the situation and condition of the real implementation of the curriculum in schools compared to the standard process developed in the model as an ideal condition.
f) Practicality in the implementation of the evaluation, it is characterized by the use of application programs in EIKK instrument that allows evaluators to evaluate each dimension of implementation.
g) Economical, which is not too much to use substantial funds in the evaluation because it is supported by a simple model and evaluators of the internal environment of vocational high school of Building Engineering.
h) Effective and efficient, the powerful and effective in achieving the purpose of evaluation to assess performance and to give consideration in the improvement of the implementation of the curriculum in vocational high school of Building Engineering.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

EIKK model development process led to some research findings, as described below:

1) Establishment of vocational curriculum implementation evaluation model (EIKK) that can be used by vocational high school of Building Engineering. In the model development EIKK adopt and modify the model evaluation gaps (discrepancies) that compares the expected with the implementation of curriculum implemented.
2) Establishment of evaluation model implementation phase of the vocational curriculum (EIKK) in vocational high school of Building Engineering.
3) Excellence model of evaluation of the implementation of the vocational curriculum (EIKK) is the simple view, the relevance of the model of curriculum implementation, systematic, realistic, flexible, accurate, practical, economical, effective and efficient implementation.

B. Recommendations

Based on consideration of the advantages and disadvantages that exist in this EIKK models, then some of the things that was recommended from the results of this study as follows:

1) Teachers should be encouraged to be consistent and full of seriousness in implementing curriculum to curriculum design.
2) EIKK model developed can be used in evaluating the implementation of the vocational curriculum in the subject groups productive.
3) The aspects evaluated in the model EIKK, simplification or development can be done to obtain performance data and data gaps are more accurate.
4) EIKK model is recommended as a self-evaluation of the performance of the implementation of the curriculum to improve institutional capacity.

REFERENCES