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Stake Evaluation Model for Curriculum Evaluation of Electrical Engineering Study Program in Vocational High School

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This study aims to determine the level of accuracy of Stake evaluation model by applying Stake evaluation model to evaluate the curriculum in vocational high schools. Some of the evaluations that have been done rarely use evaluation methods like this done. The problems that arise are the level of accuracy of the Stake method to evaluate the curriculum in the electrical engineering study program of vocational high school. The research method used is to collect data using field observation techniques, questionnaires, and documentation, of several predetermined variables, which include: the condition of students, the condition of teachers, the process of learning, the quality of graduates, curriculum materials, partner institutions, and completeness of facilities and infrastructure. The research sample used is two vocational high schools. The data analysis uses quantitative descriptive statistics included into the Stake evaluation model grille. The results Overall the result of this evaluation is good, it means the rate of achievement the average of the three evaluation phases is 89.38%, From two research samples at two high school vocational institutions have a high correlation level with a mean of 0.97, meaning that the Stake evaluation model has a high level of accuracy to use as a model of curriculum evaluation in a vocational school electrical engineering program.

Keywords: Evaluation, Stake, Curriculum.

1. INTRODUCTION

Many restrictions on curriculum, one with another, vary. This difference is due to different viewpoints between the one with the other. Experts try to arrange these curriculum boundaries from different perspectives and experiences.

Suggests there are two things related to the curriculum, namely: curriculum improvement and curriculum change. Curriculum improvement emphasizes the repositioning of certain aspects without changing the basic concepts of the curriculum. While the curriculum change emphasizes on the framework, design, objectives, contents, curriculum material area and learning activeness.¹

The curriculum as a supporting factor to improve the quality of graduate performance, the understanding of the curriculum stretches and varies from the simple understanding of the curriculum as a set of subjects to the curriculum as life skills. The curriculum as a subject is an understanding that links the curriculum with the list of subjects taught. Thus the curriculum as a planned activity program includes scope planning, sequencing,

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subject balance, teaching techniques, how to motivate students and others planned earlier in the lesson.²

The national education system it is stated that: The curriculum is a set of plans and arrangements concerning the objectives, content, and learning materials to achieve specific educational goals.³

The philosophical-based education is oriented to the flow of empiricism, which is defined as the flow of science and philosophy based on empirical methods. Empirical meaning that the curriculum developed based on experience gained from the invention, experiment, or observations that have been done. This flow of empiricism explores the view that all knowledge is acquired through experience or through the sense apparatus. The concept of tabula rasa from John Locke sees the human mind as essentially passive and ready to accept, so that human success is determined by external influences.⁴

The philosophical basis of Prosser suggests that an effective consolidation of the habits of each learner will depend largely on the proportion as the exercise provides opportunities for the development of real work and not just imitation. Furthermore, Prosser said at point 11 that the most appropriate source of data for vocational education materials is a close experience with

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work and at point 12 it is also said that for each particular position there is a core part which is a very important part and there are other parts that fit the job other anyway.⁵

Based on this empirical understanding, then in curriculum planning need to present four factors as follows:

(1) the curriculum is expected to change behavior;

(2) the curriculum should have clear objectives, content and ways of learning;

(3) the objective should be used as a control tool of behavior change due to the learning process of the teacher;

(4) curriculum materials serve as environmental stimuli or behavioral controllers.5

These four factors are then used as the basis for curriculum development concepts. In addition to these four factors, the existence of a competency-based curriculum is deemed appropriate because a graduate is required to have certain competencies (outline of Education and training program of industrial electrical expertise program, Ministry of National Education: 2004).⁶

2. EXPERIMENTAL DETAILS

The purpose of this research is to evaluate the implementation of curriculum of international standard technique, in the field of electrical engineering expertise of the industry related to the stages in the evaluation of countenance model from Stake as follows:7

- 1. The preliminary stage (antecedent)
 - a. Evaluate the condition of students' academic ability.

b. Evaluating the readiness of students in following the learning process. IP: 182.255.2.10 On: Tue, graduate conditions.02:36

c. Evaluate the activity of students during the Alearning Scientific Publishers process.

d. Evaluating student activities after completion of the learning process.

e. Recognize the socio-economic conditions of students.

f. Evaluate qualifications of faculty on aspect of paedagogic competence, professional competence, social competence and personality competence.

g. Evaluate the physical condition of the school and the equipment used for the learning process.

h. Evaluate the condition of workshop and laboratory and its supporting equipment.

i. Evaluating the level of teacher's understanding of the curriculum.

2. Stage process (transaction)

a. Evaluating the learning process in the electrical industry study program SMK technique international standard. b. Evaluate the use of facilities and infrastructure.

3. Stage of results (out come)

a. Evaluate the acquisition of the average value of UN students.

b. Evaluating the competence of graduates through certification of competencies issued by authorized institutions.

c. Evaluate graduates who are already working.

3. RESULTS AND DISCUSSION

Data from the results of the analysis, then carried out the discussion. In order for the discussion to be more focused then, the data from the analysis is included in the Stake model chart.

In the expected condition all are 100%, meaning there is no gap between the three phases of the evaluation, but in actual conditions there is a gap of the rate between the three phases of the evaluation.

Between antecedent and transaction, there is a gap between antecedent of 88.7% with a transaction of 99.45%, meaning that there is a positive (increase) distortion at the transaction of 10.75%. The magnitude of this figure can be interpreted that although in antecedent there are deficiencies of each component of its evaluation, but it turns out that in trasaction this can be better (increased percentage), means the process that occurs when learning and the use of facilities and infrastructure becomes better.

On the transaction and outcome happening gap, i.e., between the transaction of 99.45% with outcome of 80%, it means a negative distortion (percentage decrease) of 19.45%. With this figure, it means that the outcome is a gap in the components of the condition of graduates and partner institutions.

In outcome and antecedent there is gap, that is between antecedent equal to 88,7% with outcome equal to 80%, there is negative distortion (decrease) equal to 8,7%. However this distortion is smaller when compared with the previous two phases, i.e., 10.75% and 19.45%. Meaning an antecedent with outcome is only 8.7%. The desired expectation at least between the antecedent as the initial condition and the out come as the final condition may occur. This increase in achievement rate, or even the minimum is the same, therefore in order to increase the acquisition of this outcome number needs to be refined again on the transaction, and outcomes itself mainly on the components of

4. CONCLUSION

This research can be summarized as follows.

- 1. In the introductory phase (Antecedent)
- (a) The condition of students consisting of sub component, the achievement rate is only 91.8% academic ability, readiness of students in following the learning process, students' activity during the learning process and activities after the learning process and the socio economic condition of the students, it has not reached 100% as the standard set.

(b) The condition of teachers consisting of sub-components of paedagogic competence, social competence, personality competence and professional competence has reached 100%, from the standard, but there are still sub components that still lack the sub component of social competence, this deficiency because of this social competence with engagement indicators a person in social activities and activities in the environment is part of one's character.

(c) Condition of facilities and infrastructure, which consists of sub-components of learning room conditions and learning tools, workshop equipment and laboratories, hygiene facilities, libraries and conditions of information technology facilities, reaching 88.9% of the standard.

(d) Understanding of teachers to the curriculum consisting of the basic understanding of curriculum, productive program, curriculum document, learning program plan, hand book, teaching materials, and evaluation reach 88.9% of the standard, there are unfulfilled, hand books and lesson plans that are not yet in English.

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2. Phase process (Transaction)

(a) The learning process consists of sub-components of teacher preparation teaching, activities while the teaching process takes place, and after the teaching process is complete, reaching 100% of the standard, but there are sub-components that are still lacking, i.e., after teaching activities not all teachers record in the daily journal teaching and assignment to students.

(b) The use of facilities and infrastructure, which consists of the components of the use of study space, the use of workshop equipment and laboratories, the use of information technology and the use of libraries reached 88.9% of the standard.

3. Phase results (Out come)

(a) The partner institutions consisting of the sub-components of the company that are the partners of the school for student industrial working practice, competence testers, recruitment, where graduates work, overseas companies and companies who have provided school assistance, reach 80% of the standard.

(b) The condition of graduates of students who are composed of the components of the value of national examination, the value of competency test, the percentage of graduation students, graduates working abroad, graduates who be effort, graduates who continue college in diploma programs III, graduates continue to college strata I, outside the field of expertise and the existence of alumni ties, reaching 80% of the standard. Overall the result of this evaluation is good, it means the rate of achievement the average of the three evaluation phases is 89.38%, but the improvement of the current school status is still in the pioneering stage towards the true SBI at the stage of becoming self-sufficient school, so improvement must still be made, and regular evaluations should also be made, both by the school itself and by the relevant agencies, which in turn the figure of achievement of each component in this evaluation can reach 100% and become self-reliant school.

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