ANALYSIS OF THE EFFECTIVENESS OF THE MODEL GOVERNANCE LINK AND MATCH BASED INDUSTRY (IB-LAM) AT VOCATIONAL HIGH SCHOOL TECHNOLOGY AND ENGINEERING

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The purpose of this study was to analyze the effectiveness of the application of governance model Link and Match-based industries at the Vocational High School of Technology and Engineering. The focus of research is based on analysis of the achievement of competence in industry expertise and employability skills and character development of students in the implementation of the Job Training Industry (JTI) by using a model of governance Link and Match-based industries (IB-LAM) at class XI Power Installation Engineering Department SMKN 1 Minasatene. The method used was survey method with descriptive quantitative approach. The subjects were 20 students who carry out the Power Installation Engineering Department JTI the Cement Industry in the District Pangkajene and Islands using the criteria of effectiveness as an indicator that is the result of the implementation of JTI, student activities, student responses, teachers and mentors in the industry, as well as the implementation / management models IB- LAM. From the research and data analysis will be undertaken concluded that: first, Implementation JTI with IB-LAM models support the achievement of competence and expertise in the Industry Employability Skill and character development of students where 90% of students get scores of post-test assessment results above 6.5 while for Employability Skill and Character development showed a total of 95% in the category very well and good; Second, student activities included in the ideal category with an average percentage of 98.75% indicator stage IB-LAM models implemented according to guidelines; Third, student response, teacher and supervisor of the models IB-Lam obtained positive response of more than 50%; Fourth, the ability of teachers and counselors in applying the model included in the IB-lam very high. From the results of this study are expected can be such a reference in an increase in the effective implementation of the Job Training Industry (JTI) by applying Governance Model Link and Match-Based Industries (IB-LAM) at Vocational High School, especially in vocational Technology and Engineering.

Keywords: Effectiveness, Governance Model Link and Match-based Industry (IB-LAM)

Introduction

Vocational High School is part of the secondary education system that are specifically prepared students to be able to go directly into the workforce. In an effort to equip vocational students with the knowledge and experience as field work is born the concept of "Link and Match" between the CMS with the World Business / Industrial World (Dudi). "Link", regarding the process to be interactive between school learning system and in industry, while "Match" concerning the

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results of which should be appropriate or commensurate between the school obtained to be used in industry.

In Law No. 20 of 2003 on National Education System (Education Law) Article 21 states that "Vocational education is secondary education that prepares students primarily for work in a particular field". While in Government Regulation No. 19 Year 2005 on National Education Standards, vocational Secondary Education is education in secondary education that promotes the development of students' abilities to certain types of work.

As a form of implementation of the Act and the mandate of the Government Regulations on Vocational education system then it should pay attention to the achievement of their students competency skills. Achievement of Competence for vocational students in addition acquired at school can also be maximized through the concept of Link and Match one of them with the implementation of the Job Training Industry programs that can provide direct work experience, for students with industry competence, employability skills in the industry, and can also develop students' character.

Achievement of competence, employability skills, as well as students' character can be developed with management JTI targeted, systematic and accountable. To achieve student ability to work in industry but the reality on the ground based on empirical observations and data obtained JTI known that the management of the vocational school in the District Pangkajene and Islands has not been systematic and directed that it can not achieve the maximum goal of JTI itself.

As stated by Nelly (2013) in his research concluded that the implementation of the JTI does not have a significant influence on the improvement of student competence. Also in the planning stages, implementation and evalusinya there are still weaknesses that make the implementation of the JTI is not effective in achieving the expected results, to students it is necessary to remember that the management or the management of the dual system of education in this regard JTI is an activity or series of activities such as the process of managing or arrange in order to operate effectively and efficiently so as to achieve the purpose of optimally. (Suwarno, 2009) The management concept consists of Design (Planning), Organizing, Mobilization (Actuating), and Controlling. Governance model Link and Match-based industries (IB-LAM) is a result of the development of governance models Link and Match on the implementation of the industrial working practices (JTI) which stages arranged in the form of grooves concept implementation with multiple device support in the preparation, monitoring and evaluation based industries. (Iswal, 2015). Effectiveness is the relationship between the output of a central responsibility of the goals that must be achieved. Effectiveness is a picture of the level of success or excellence in achieving the targets and the attachment between the values vary.

From the definition above is very clear that the concept of Link and Match in this case the implementation of the Job Training Industry (JTI) in need of a good management model with the concept of targeted and systematically to support the achievement of competence in industry, employability skills and character development so that the implementation can be accounted JTI, Implementation of governance model Link and Match-Based Industries (IB-LAM) is one of the main models that can be used in management but still requires study and related analysis on the effectiveness of the model used. For students that at this research will show the effectiveness analysis model of governance Link and Match-based industries (IB-LAM) at Vocational High School field of technology and engineering with the formulation of the research problem is, How can the effectiveness of the governance model Link and Match-based industries (IB-LAM), and the research objectives are: to determine the effectiveness of the governance model Link and Match-based industries (IB-LAM).

Research Method

The type of research that used is survey with descriptive quantitative approach to describe or illustrate the effectiveness of the application of governance model Link and Match-Based Industries (IB-LAM) on the implementation of the Job Training Industry (JTI) in the vocational fields of technology and engineering. Moreover, data is collected by observation method with direct observation during the execution of the study, interviews were conducted to collect data in the form of direct revelation from the data source, distributing questionnaires containing questions and statements as raw data that will be analyzed, as well as data collection in the form of documentation of the results of the implementation of the JTI students in the form of books Industry Competency Standards (IAS), record student work, student attendance, and other relevant documentation.

In this study the indicators used are the components of effectiveness is the result of the implementation of the JTI, and supervising student activities, student responses and counselors, as well as the implementation / management models IB-lam. In which of these indicators generally becomes variable, namely the study of the effectiveness of the application of the IB-lam in the Implementation of Industry Work Practices class XI Power Installation Engineering Department of SMK Negeri 1 Minasatene.

Based on theoretical studies and methods peneitian which has been described previously, it can be described framework of this study as shown below:

From the figure above framework, it can be explained that the implementation of the model IB-Lam is the development of the management of the JTI, which is part of the Link and Match in Vocational High School 1 Minasatene, which focuses on four phases of management: planning, organizing, directing/implementation and monitoring/evaluation. From the stage of integration and employability skills
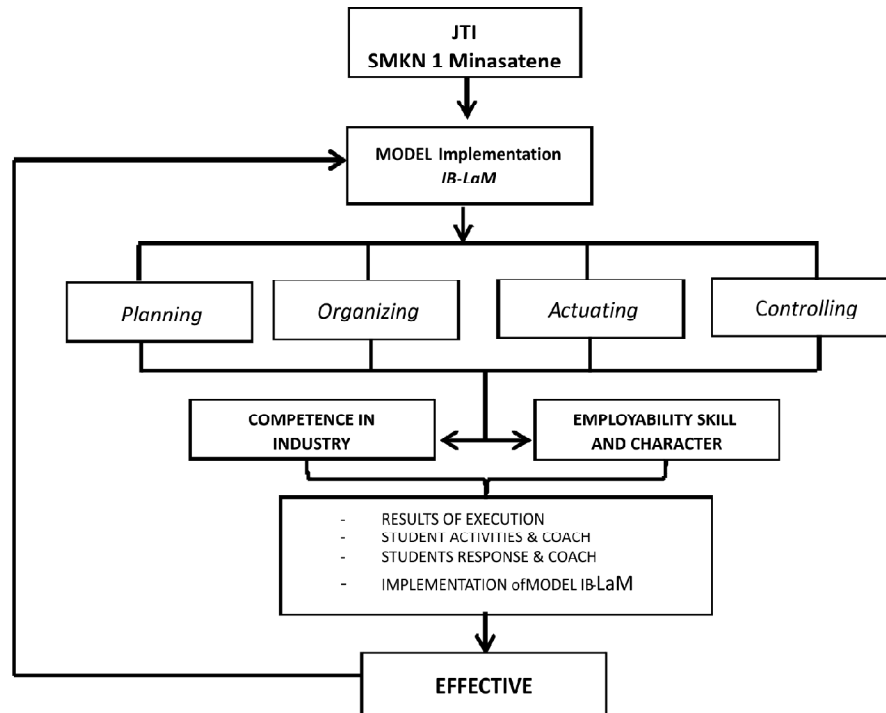
Figure 1: Conceptual Framework

and character cultivation more focused as accompanist impact in the application of the model IB-LaM before being declared effective by the effectiveness indicators, namely, results of implementation, and supervising student activities, student responses, teachers and counselors, as well as adherence to the model IB- LaM, if otherwise eligible, then the model IB-LAM is considered effective, if not, it is necessary reconsideration on the model IB- LaM related what needs to be addressed to achieve a model IB-LaM effective, according to the criteria of effectiveness being addressed by Nieveen, 2007.

Result Research

Based on the results obtained by the answer to the problem in this research which shows a general overview of the implementation of the JTI by applying the model IB-LAM as follows:

Analysis of the data from the pre and post test in the study that describes the achievement of Competence expertise in the industry can be seen in the graph below:

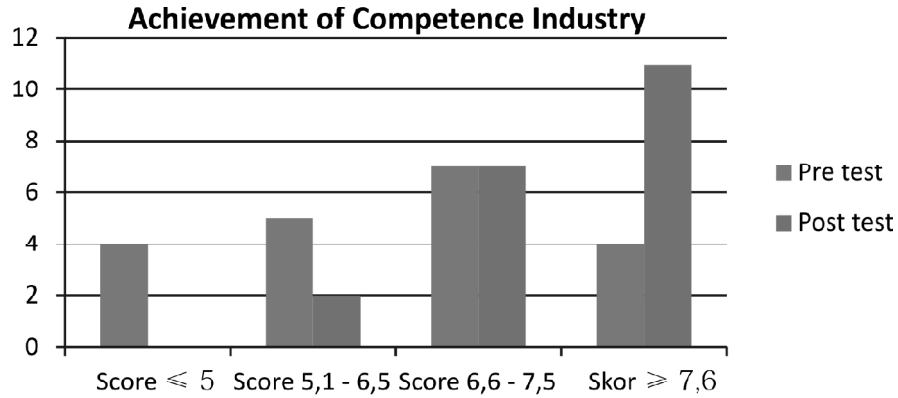**Achievement of Competence Industry**

Figure 2: Graph achievement of Competence Industry

The picture above shows that of the 20 subjects studied 18 people or 90% obtain post-test scores above 6.5. there was an increase of student competence or indutrial works.

Analysis of data from observations and interviews on teachers and industry mentors that describe the development Employability Skill and Character students can be seen in the chart below:

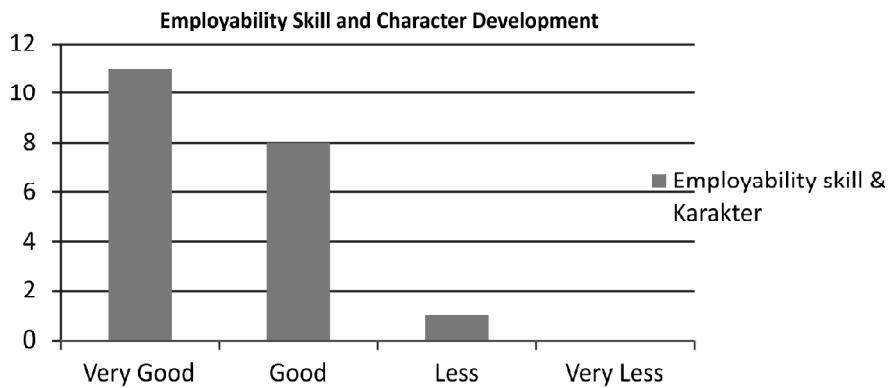**Employability Skill and Character Development**

Figure 3: Graph Employability skills and character development

The picture above shows that of the 20 subjects studied 11 people or 55% showed Employability Skill and excellent character, 8 people or 40% in good and very good categories and only one person, or 5%, which is still in the category of less. The data also show there is an increase in employability skills of student in conjuction with the students character development.

The data analysis phase of the JTI observation results using a model IB-Lam can be seen as the chart below:

Implementation Of Stages Model IB-LAM
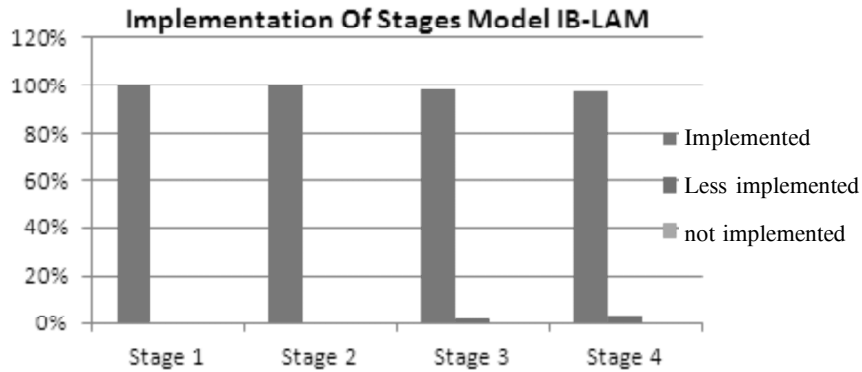
Stage 1 = Planning; Stage 2 = Organizing; Stage 3 = Implementation; Stage 4 = Evaluation

Figure 4: Graph Model feasibility stage IB-LAM

The picture above shows that the stage of planning and organizing can be accomplished 100% while Phase Implementation and Evaluation carried out 98% and 97%. The data also show show that the implementation process and planning process is done mean while there is a need to improve the implementation process and evaluation of the students to manage the program well.

Analysis of data from interviews and questionnaire responses related to students and tutors of the models IB-lam on the implementation of the JTI can be seen as the chart below:
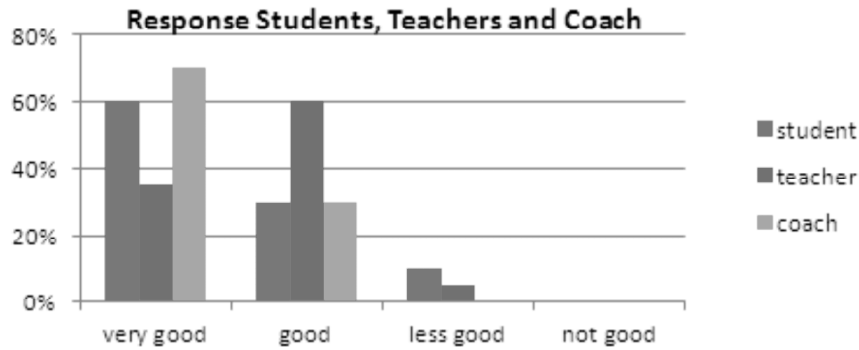
Response Students, Teachers and Coach

Figure 5: Graph response Students, Teachers and Mentors

The figure above shows the responses of students to 60% in the category of excellent, 30% good category and 10% in the unfavorable category. Response teachers 35% in very good category, 60% in both categories, and 5% unfavorable category. While the mentors in the industry's response showed 70% excellent and 30% good.

Analysis of the data of observation, interviews and questionnaires related to the ability of teachers and counselors in applying the model IB-LAM on the implementation of the JTI can be seen as the chart below:
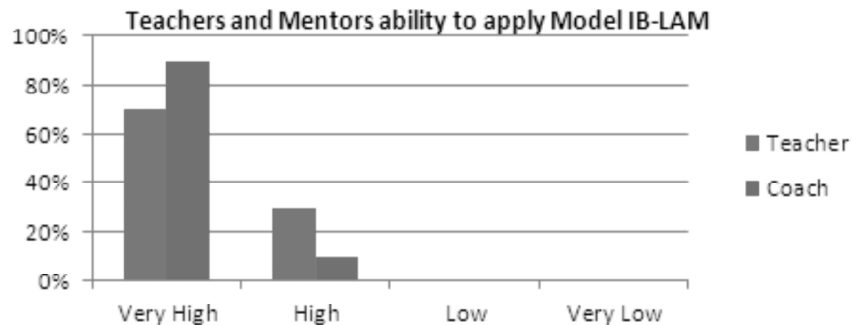

Figure 6: Graph Management / Application Model IB- LAM

The above data indicate that the ability of teachers to implement the model IB-Lam relatively adequate with a percentage of 70% at very high category and 30% in the High category, while the mentors in the industry's ability to apply the model IB-LAM is also quite adequate with a percentage of 90% in the category of very high and 10% in the High category.

Discussion

Discussion of descriptive analysis of data each criterion of effectiveness is obtained either through observation, interviews, questionnaires, as well as the pre and post test to illustrate the effectiveness of the implementation of the JTI with the adoption of the Model Governance Link and Match-Based Industries (IB-LAM), a student of class XI Subject Power Installation Engineering Department Vocational High School 1 Minasatene are as follows:

Implementation Results

From the analysis of data obtained through the pre and post test results obtained indicate that an increase in knowledge and competence of students with 90% of students received post-test scores above 6.5. This shows that the model IB-LAM systematic impact will increase the ability and knowledge of the industry competence of students.

In addition, from observation and interviews with teachers and counselors in the industry note that the Model IB-LAM which directly integrates Employability Skill and Character in an impact device model Employability Skill and Character increase in students in the implementation of the JTI, it is seen from the results that the percentage of 55% the very good category and 40% in both categories, while

only 5% or 1 in the category less. From this data it appears that there was an increase learning achievement in the implementation of the results JTI, As in theory by Hetika (2008), achievement is made manifest achievement or proficiency in the skills or knowledge society.

Student Activities

The data analysis phase of the JTI observation results using a model IB-Lam showed that stage Planning and Organizing can be accomplished 100%. Implementation Phase accomplished 98%, while 97% keterlaksanaanya Evaluation. So that the overall activity of students in the administration of JTI with IB-LAM model runs according to the guidelines even though there is little consistency issues related to the presence of the teacher or the students at the stage of implementation and evaluation so that there is a 5% weekly is not running. This is in line with the proposed Syaiful Djmarah (2003) that, learning activities undertaken by each student is always different and are affected by the use of the method and approach to learning and orientation activities.

Student Response Teacher and Coach

Analysis of data from interviews and questionnaire responses related to students and tutors of the models IB-LAM on the implementation of the JTI show the response of students 60% in the category of excellent, 30% good category and 10% in the unfavorable category. Response teachers 35% in very good category, 60% in both categories, and 5% unfavorable category. While the mentors in the industry's response showed 70% excellent and 30% good. Overall response to the criteria of students, teachers and industry mentors have shown a positive response to the model IB-LAM in the implementation of the JTI as proposed by Sugiyono (2012) that if the validation results showed the percentage of e" 61% then the product is declared received a positive response.

Management / implementation models IB-LAM

Analysis of the data of observation, interviews and questionnaires related to the ability of teachers and counselors in applying the model IB-LAM on the implementation of the JTI shows that teachers' ability to apply the model IB-LAM classified as adequate with a percentage of 70% at very high category and 30% in the High category, while mentors in the industry's ability to apply the model IB-LAM is also quite adequate with a percentage of 90% at very high category and 10% in the High category, In general the feasibility and implementation of IB-LAM models including very well with the degree of feasibility in the category largely accomplished (Bloom, Madaus & Hasting, 1981). This illustrates that the implementation of the JTI with IB-LAM models designed to systematically and more targeted will be more easily implemented by teachers and counselors in the industry.

Conclusion

From the research that has been pointed out earlier then formulated some conclusions as follows:

- Results of Industry Work Practices Implementation by applying Model IB-LAM complied with the thoroughness of the increase in value from pre to post test and appears also increase the ability of employability skills and character of students and the application of this model. On the other hand, in the implementation of the Job Training Industry by applying Model IB-LAM students classified as an ideal activity with implementation almost all stages of the model according to guidelines

- Students, Teachers and Mentors in the industry to respond positively to the governance model link and Match-Based Industries (IB-LAM), moreover Teachers and Mentors in the industry are able to manage and implement the JTI with the model IB-LAM

- Based on the conclusions of the points above criteria then in general it can be concluded that the Model Governance Link and Match Based on the Industry Vocational High School field of technology and engineering applied to the implementation of the JTI Class XI students Power Installation Engineering Department of Vocational High School 1 Minasatene, Pangkajene and Islands districts fairly effective because it has met all the criteria.

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