# Using Management by Objectives in Evaluating Industrial Training Program at Vocational High School

# Kadek Pusparini Putri

Sekolah Tinggi Ilmu Administrasi & Manajemen Kepelabuhanan Barunawati Surabaya, Indonesia

**Abstract:** The objective of this research is to describe the quality of industrial training program viewed from the three aspects of program management 1) planning, 2) implementation, and 3) results. The study used Management by Objectives (MBO) model conducted during 2013-2014 academic year in Vocational High School located in Surabaya, Indonesia where interviews involved four industrial partners, six teachers and seventy-five students from three different classes. The results showed: (1) an increase in synchronization of curriculum reflected in well-designed instructional program of cooperation with industrial partners (2) the implementation of the industrial training programs are still time-based not competencies-based yet (3) the evaluation of student learning outcomes does not strictly apply the competency criteria.

**Keywords:** program evaluation, industrial internship program, Management By Objective (MBO), Vocational High Schools.

## **1. INTRODUCTION**

Industrial training program is part of the educational dual system where the implementation of the program expects students have the opportunity to develop vocational skills in accordance with expertise in each study so that students have a professional attitude, work spirit, discipline and work ethic which will be very valuable competence when entering the world of work.

Professional expertises basically contain elements of science, engineering, and tips. Elements of knowledge and techniques can be learned, while elements of troubleshooting cannot be taught, but can be controlled through a process of habituation and internalization. Tips are elements that become the determining factor for a person's professional expertise and this can only be mastered through direct way of doing the work in the field of the profession itself as that way would grow a professional expertise based on the amount of work experience. Based on this fact, the practice of vocational subjects presented in school even equipped with adequate and modern equipment, basically, they are only able to present the process and simulated situations (imitation), but not able to provide professional expertise that is similar to the actual or real world of work.

This shows the necessity to be evaluate industrial training program which has been running for the basis of the improvement of the program in order to improve the quality of education and learning. The results of the evaluation are expected to present recommendation eventually leading to improve quality, implementation and improvement activities to produce graduates of Indonesian Vocational High School who are professional, productive, competitive and innovative.

## 2. LITERATURE REVIEW

Fitzpatrick (2004: 5) explains that an evaluation requires a valuable judgment about the worth of the program. Evaluation is an official activity in the field of education to determine the quality and effectiveness of a program, product, project, objectives or curriculum. The decision is determined based on the adequacy of data, beliefs and interpretations that are relevant to the evaluative judgment. For that there are three essential elements to evaluate: setting standards, collecting data and using the standard to determine the quality. The decision is determined based on the data compared to a predetermined standard.

According to Stufflebeam (2007: 4-5), as a process, there are three steps taken in the evaluation program: describing, obtaining and providing information to define alternative decisions. This

#### Kadek Pusparini Putri

approach is oriented towards management and well known as Context, Input, Process, Product (CIPP) model. This model requires that an evaluation should be done on each component of the program. This model represents a comprehensive framework to conduct formative and summative evaluation against a program, project, personnel, product, organization, and systems evaluation.

According to Royse (2010: 5), the program is a unit of activity or a collection of several similar activities as the implementation of a policy taking place in a continuous process and occurring in an organization involving a group of people. Similarly Wholey, et al., (2010: 5), explained that the program is a set of resources and activities that are directed to one or more destinations together under the direction of a manager or management team. There are three important matters should be emphasized in determining the program, namely: (1) the realization or implementation of a policy, (2) occurring in a relatively long time-not a single activity but continuously and (3) occuring within an organization involving a group of people (Arikunto 2009: 4).

Objectives of vocational secondary education (Kurikulum Sekolah Menengah Kejuruan, 1996: 2) are: (1) to improve the knowledge of students to continue their education at a higher level and to develop themselves in line with the development of science, technology and art, (2) to improve the ability of students as members of the community in organizing a reciprocal relationship with the social environment, culture and natural surroundings.

Management by Objectives (Gibson, 1986: 507-508) may also be referred to as management by results, Goals Management, Work Planning and Review, and others are essentially the same. Management by Objectives (MBO) emphasizes the importance of the role of objective in effective planning to establish procedures for the achievement of both formal and informal by first of all setting goals to be achieved followed by activities to be completed then reviewing the work that has been done. Advantages of this model are the focus on achieving the objectives of the program, the participation between superiors and subordinates in the determination of the planned program objectives. Application of Management by Objectives (MBO) is based on the principle one step down. Management by Objectives (MBO) requires a hierarchy of objectives within the organization or company. Each organization has its objective, namely the goals or objectives to be achieved in the coming years as the elaboration of objectives in the strategic plan of the organization or company. Management by Objectives (MBO) is an evaluation system oriented towards achieving work targets and suitable to be applied to the evaluation of industrial training program.

Based on above, it can be concluded that the evaluation of the program is a systematic process through scientific procedures. The evaluation is done to determine the value or level of success of an activity in terms of effectiveness or efficiency to give consideration whether the program is continued, repaired or terminated.

Evaluation program on industrial job training for Vocational High School means a systematic activity to gather information about how the program works, what impact that may occur, and so on, so that it can assist in determining the next alternative decisions. Two major functions of the evaluation are formative and summative. Formative function, namely the evaluation used for the improvement and development of ongoing activities (programs, people, products, and so on) or when the program is still close to the beginning of the activity. The purpose of formative evaluation is to determine how far a program designed has taken place as well as to identify obstacles whereas summative function is performed after the program ends. The purpose of summative evaluation is to measure the achievement of program or used for accountability, description, selection or advancement (Arikunto, 2009: 42-43). Given that the target objects and the execution time are different between formative and summative evaluation, the evaluation should be able to assist in needs analysis, development, implementation, improvement, responsibility, accountability and selection of programs and be able to improve motivation and to increase the knowledge of all parties involved.

## **3. DATA COLLECTION**

This evaluation study was conducted at the Public Vocational High School II in Surabaya Indonesia, academic year 2013/2014 at 11<sup>th</sup> grades Light Vehicle Engineering Department involving four industrial partner, 6 teachers and 75 students from three different parallel classes of the respective department.

This study uses a qualitative method of Management by Objectives (MBO) model because the results of this study will describe the suitability of the program objectives with the industrial job training

program created by the school to the needs of students in Vocational High School. The data and information collected are mostly qualitative data. The instrument used in this study is the observation sheet amounted to 20 grains of votes related to the design, the implementation and results of the industrial job training program. Interview guidelines are amounted to a total of 34 questions related to industrial job training program, from planning, implementation, and impact felt by students. Interview component includes all activities related to industrial job training program.

The questionnaire amounted to a total of 23 questions are used to collect information about policies, goal setting, execution time, prerequisites, infrastructure, human resources existed for activities and evaluation of industrial job training program in terms of attitudes, knowledge and skills.

Results of questionnaires in the form of a percentage of the later is described, while the result of the interview, observation and documentation are analyzed with data analysis techniques of Miles and Huberman that the analysis is carried out through three activities simultaneously: data reduction, data presentation, as well as inference and data verification (Miles et al., 1992: 16). The validity of research data is controlled through the test of credibility, transferability, dependability and confirmability (Sugiono, 2011: 364).

### 4. RESULT AND DISCUSSION

### 4.1. Planning of Industrial Job Training Program

Based on observations on planning of industrial job training program, the following is identified: (1) the synchronization of curriculum was last held in 2013 for the Department of Mechanical Light Vehicle Engineering, (2) only a few Memorandum Of Understanding (MOU) made between the school and the business and industries conducted in 2010, (3) cannot be detected what competency skills to be achieved by students on the implementation of industrial job training program (4) the distribution of schedule for the implementation of the industrial job training program has been determined by school department by mapping who does what beforehand.

Implementation in the real learning process not only in the form of industrial job training program but also at certain times (scheduled) students perform learning activities theoretically for approximately 8 months in classroom and media room at the automotive workshop available in Public Vocational High School II Surabaya, Indonesia.

### 4.2. Implementation of Industrial Job Training Program

Based on observations on the implementation of the industrial job training program, the following is identified: (1) students obtain a guidebook or journal as a guide for implementing industrial job training program. The contents of the journal include the identity of the student and the industry in where students conduct industrial job training program, discipline, manual of journals filling, reports of the daily activities of the student during industrial job training program, (2) the student is considered employees when in industrial job training program so students must follow all the discipline in industry ranging from working hours, clothing or work wear, and the work of real mechanics, (3) instructors conduct guidance to the students for carrying out industrial job training program properly so that students are gaining knowledge in terms of skills and knowledge, (4) monitoring activities performed by teachers are not relevant to existing regulations, due to the absence of a standard provision of how many time the minimal monitoring activities to be carried out in each batch.

### 4.3. Result of Industrial Job Training Program

Based on observations on the results of the industrial job training program, the following is identified: (1) students complete a journal that has been given by the school as a record of the daily performance of the student during industrial job training program, (2) at the end of industrial job training program, some industries give tests to students as the grade inform of written test, presentations on what the students do during the job training program, but few industries only take students grades based on students' everyday activities without conducting summative test, (3) the provision of grade is usually done by the head of the workshop with the recommendation of the instructor / mechanics, (4) Industries do not issue certificates to students who have completed the job training program, but the school issues the certificate with the grade recommended by the industry.

#### **5.** CONCLUSION

Based on the results obtained in evaluation research related to industrial job training program in Vocational High School, it is concluded that: the results of an evaluation of the planning phase in terms of increased synchronization of curriculum, learning cooperation programs with industry partners have been well formulated. Students have tried to show a good performance and discipline during industrial job training program but they are still often reprimanded by mechanical or instructors in business and industry world in terms of discipline, work ethos and ethics in the work. Mechanical or instructors in business and industry world have shown activity in accordance with the duties and responsibilities to guide students during industrial job training program but still necessary to improve the communication between a tutor from the school with a mechanical / instructor in monitoring student progress and the progress of technology in the industry. However, the evaluation of student learning outcomes do not explicitly use the criteria of competence. Students on industrial job training program give good assessment to the workplace, mechanical / instructor, as well as they assess vocational competences given by world of business and world of industries have been relevant with the expertise requested Lightweight Vehicle Engineering program

### REFERENCES

Arikunto Suharsimi. Dasar-Dasar Evaluasi Pendidikan. Jakarta: Bumi Aksara, 2008.

- Arikunto Suharsimi dan Cecep Safruddin Abdul Jabar. Evaluasi Program Pendidikan: Pedoman Teoretis Praktis Bagi Mahasiswa dan Praktisi Pendidikan Edisi Kedua. Jakarta: Bumi Aksara, 2009.
- Direktorat Pendidikan Menengah Kejuruan, Konsep Sistem Ganda pada Sekolah Menengah Kejuruan di Indonesia (Jakarta: Dirjen Dikdasmen), 1994.
- FitzpatrickJody L., James R. Sanders, dan Blaine R. Worthen. *Program Evaluation: Alternative Approaches and Practical Guidelines Third Edition*. United State of America: Pearson Education, Inc., 2004.
- Gibson James L., John M. Ivancevich., James H. Donnelly. *Organisasi dan Manajemen*, terjemahan Djoerban Wahid. Jakarta: Erlangga, 1986.
- Kurikulum Sekolah Menengah Kejuruan, Landasan, Program dan Pengembangan (Jakarta: Depdikbud), 1996.
- Miles, Matthew B & A. Michael Huberman. *Analisis Data Kualitatif: Buku Sumber Tentang Metodemetode Baru*, terjemahan Tjetjep Rohendi R. Jakarta: Universitas Indonesia Press, 1992.
- Royse David, Bruce A. Thyer, dan Deborah K. Padgett. *Program Evaluation: An Introduction, Fifth Edition*. Canada: Nelson Education, Ltd., 2010.
- Stufflebeam Daniel L., Anthony J. Shinkfield. *Evaluation Theory, Models and Applications*. United State of America: Jossey-Bass, 2007.
- Sugiyono. Metode Penelitian Kombinasi: Mixed Methods. Bandung: Alfabeta, 2011.
- Tayibnapis Yusuf Farida, Evaluasi Program dan Instrumen Evaluasi. Jakarta: Rineka Cipta, 2008.
- Warsita Bambang, Pendidikan Jarak Jauh: Perancangan, Pengembangan, Implementasi, dan Evaluasi Diklat. Bandung: Remaja Rosdakarya, 2011.
- Wholey Joseph S., Harry P. Hatry dan Kathryn E. Newcomer. *Handbook of Practical Program Evaluation, Third Edition.* California, USA: Jossey-Bass, 2010.