# Improving Quality of Vocational Education through Teaching Factory's Life Base Learning

**Yoto. Edi Sutadji**[a]
[a] Pendidikan Teknik Mesin, Fakultas Teknik Universitas Negeri Malang, Indonesia
Jl. Semarang No. 5 Malang

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**Abstract:** Education is very important in improving the quality of human resources (HR). Good quality human resources are expected to fill jobs in accordance with their expertise and can further advance the country. In the world of education to realize this one of them is by the existence of vocational education. Preparation of skilled personnel with the approach of life base learning (LBL) through Teaching Factory (TeFa) is very much needed for vocational education. Therefore, in every vocational institution, they should have LBL-TeFa preparation, implementation, and evaluation in accordance with education directorate standards. So as to improve the quality of vocational education. This paper discusses improving the quality of vocational education through LBL-TeFa. The aim is to explain the LBL-TeFa model starting from preparation, implementation, and evaluation. Through this model SMKs can use it to improve the quality of vocational education.

**Keywords:** Improving the quality of vocational education, LBL-TeFa

## 1. Introduction

According to Behroozi (2014) education is able to change and develop a country to achieve economic development. Cheng (2010) argues that current national and international education policies have shown growing interest in vocational education. According to Forster & Bol (2018) preparation of the younger generation in the labor market is the main responsibility of the education system. Vocational education has an important role in the distribution of students in business and industry. Choi, Jeong, & Kim (2019) revealed that training for specific jobs in manufacturing, agriculture, or trade through a combination of theoretical teaching and practical experience provided by many secondary schools is the definition of vocational education. According to Breen (2005) vocational education is seen to have many benefits for the allocation of the young generation's job market. Vocational education is a strategic program to provide mid-level skilled workers in supporting economic development and manufacturing development (Djojonegoro, 1997; Depdikbud, 1999).

Polat, Uzmanoğlu, İşgören, Çınar, Tektaş, Oral, & Öznaz (2010) state that the main purpose of vocational education is to make individuals obtain the knowledge, abilities, and efficiency of practices needed for certain jobs. Vocational education reforms have shown positive symptoms. According to Billett (2011); Rivai & Murni, (2010) vocational education has goals focused on preparation for entering the world of work, selection and career development, developing competencies, and supplies of supportive experiences for the transition of job titles from one position to another both within one company / industry or to other companies / industries.

Merging practical knowledge and academic subjects, so that linking vocational training and general education is a step that must be taken (Lewis, 2005; Winch, 2006). According to Finch & Crunkilton (1989); Billett (2011) the quality of vocational education is strongly influenced by several factors, including the factors of students, teachers, learning infrastructure, learning environment, school management, and industry participation in improving vocational education.

According to Hasanefendic, Heitor, & Horta (2016) vocational education and training faces new challenges. Therefore vocational secondary education must take policy steps that lead to the ability to support the creation of human resources, capable of facing free competition. So that there is productivity growth and prosperity development (Schwab, 2014). Through the vision of vocational secondary education, namely the realization of superior vocational education and training institutions. Preparation of skilled personnel with the approach of life base learning (LBL) through Teaching Factory (TeFa) is very much needed for SMKs. Therefore in every Vocational School, they should have LBL-TeFa preparation, implementation and evaluation in accordance with the standards. So as to improve the quality of vocational education.

LBL-TeFa Preparation includes preparation of infrastructure, preparation of supervisors, curriculum, preparation, student preparation, and preparation of LBL-TeFa for SMK cooperation with industry. Sampurno and Siswanto (2012: 7) state that the LBL-TeFa program can run if the facilities and infrastructure owned by the school meet the standards for conducting production activities in the form of goods and services according to their expertise program. According to Uche, et al. (2011) facilities and infrastructure are very important in the learning process. Asaaju (2012: 925) states that infrastructure is part of educational infrastructure that contributes to the indication of academic achievement or the quality of the teaching and learning process. Timilehin (2012) states that there is a significant relationship between facilities and infrastructure with student achievement in the psychomotor and affective domains.

According to Clewes (2003) an important factor that teachers must have is experience or performance. If the teacher has good performance and skills, student competence will increase. Chamma (2017) believes that

increasing self-confidence and self-esteem greatly influences the skills and competencies in obtaining good jobs for all students. The same thing was conveyed by Tsang, Hui, & Law (2011) that student confidence is needed to understand the nature and strength of beliefs that affect student performance and can be closely related to psychology such as motivation, emotional management, strategies in task selection, and problem solving resources the student.

The success of vocational schools does not only depend on professional educators or teachers, but the active role of students during the learning process is also one of the things that can determine the success of education (Fatchurrochman, 2011). Colak (2014) states that students must have the ability and skills because they can provide benefits primarily as a provision in overcoming the development of science and technology. In addition students must also be able to develop critical thinking, as well as problem solving skills.

Another step in the LBL-TeFa preparation is curriculum preparation. The curriculum is a substantial element in vocational education, because the curriculum is used as a reference before the teacher submits the material (Bahri, 2008). Curriculum preparation involves the industry as a vocational partner in improving the quality of education, in line with the opinion (Brady, 1992) that the preparation or change of curriculum is basically needed when the current curriculum is deemed ineffective and no longer relevant to the demands and developments era. Curriculum synchronization at this time is absolutely necessary for SMKs, because by synchronizing the curriculum it is expected that what is taught in schools is in accordance with industry needs.

According to Sermsuk, Chianchanab, & Stirayakorn (2014) vocational education is the right solution to help create cooperation between schools and businesses in developing many curricula that are suitable to support the needs of the industrial world. Harris, et al. (2005) revealed that good cooperation between SMKs and industry is also an important preparation step because it can improve the quality and competitiveness of students.

**2. Research Method**

The implementation of LBL-TeFa can improve student competency. Burke (2005: 12) states that competence is the ability to describe the expected results in accordance with the knowledge, skills, attitudes, and related professions. The conclusion is that competence is defined as the skills, abilities, and knowledge possessed by each individual who has become a part of himself, so that he can carry out psychomotor, affective, and cognitive behaviors to the maximum extent possible.

Abidin (2014: 1) states that learning activities are not only as a transfer of knowledge but are activities that students must carry out actively to build their own knowledge based on their potential. The implementation of LBL-TeFa is guided by LBL-TeFa teachers and mentors from industry. The industrial world is the target of the process and learning outcomes, so SMKs are required to have to apply a learning approach that is appropriate to the circumstances and the demands of the industry. One of the steps taken is the implementation of guidance from SMKs in cooperation with industry (Priyatama, 2013). According to Wibowo (2016) the main task of a vocational school in the learning process is to print a workforce that is ready to use. So students must be equipped with knowledge and skills that are in accordance with the competence of their respective expertise programs. Each Vocational School also has its own way of carrying out activities to improve student competency. One example is the difference between SMKs in setting special classes for LBL-TeFa activities.

Chukwuedo (2017) states that work readiness is strongly influenced by self-confidence because it will be a major factor in someone's success in finding work. In line with the research of Udayar, Fiori, Thalmayer, and Rossier (2018) which shows that individuals with high self-esteem have fewer difficulties related to the ability to make decisions, as well as decision making for their careers. Hostgaaard (2014) states that students' confidence affects a person's ability to work so that it becomes a determining factor for the success of a job. Self-confidence has a direct effect on careers and work abilities that are felt by themselves through career adaptation. According to Arena, Perini, Taisch, & Kiritsis (2018) basically SMK graduates are not only demanded after graduating from work, but how SMK graduates can create jobs. Therefore LBL-TeFa in Vocational Schools has the aim to increase students' self-confidence and entrepreneurial spirit.

**3. Result and Discus**

Evaluation is a component in program management. An activity must begin and end with an evaluation activity, so that the training process can be declared complete and comprehensive. Management training has its own characteristics, and evaluation is directed at controlling the achievement of objectives. So that the evaluation can be seen the effectiveness and efficiency of training activities that have been carried out. In addition, the evaluation also provides an overview of the level of success of participants, existing obstacles, weaknesses and perceived strengths. Evaluation can also be said as a decision based on the measurement results of Calongesi (1995).

According to Kumano (2001) an evaluation of an activity is an assessment during the activity taking place on data collected through an assessment. In line with this opinion. According to Sudiyanto, et al. (2017: 17) there are several methods used by LBL-TeFa special parties in evaluating activities. Evaluation of the program is a process of finding information, finding information and establishing information that is presented systematically about planning, values, goals, benefits, effectiveness and conformity of something with the criteria and goals that have been set.

Munthe, (2015) states that program evaluation can be said as one form of research that is evaluative research. Therefore in the program evaluation talk, the executor thinks and determines the steps to be carried out

as conducting research. In line with this opinion, according to Zainul & Nasution (2001) evaluation is a measurement of learning outcomes using test or non-test instruments. Evaluation of LBL-TeFa activities is used as a process for making decisions using various information that has been obtained. LBL-TeFa activities that have been well prepared, implemented and evaluated according to the standards of the directorate of education will have a good impact on improving the quality of students.

**4. Conclusion**

To improve the quality of human resources (HR). Good quality human resources are expected to fill jobs in accordance with their expertise and can further advance the country. In the world of education to realize this one of them is by the existence of vocational education. Preparation of skilled personnel with the approach of life base learning (LBL) through Teaching Factory (TeFa) is very much needed for vocational education. Therefore, in every vocational institution, they should have LBL-TeFa preparation, implementation, and evaluation in accordance with education directorate standards. So as to improve the quality of vocational education. Because the benefits of LBL-TeFa learning for vocational students are quite large, it is expected that vocational managers can organize work habits and culture for students so that after graduating they have reliable knowledge and skills to be able to compete in the world of work and / or create their own jobs.

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