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# Model of Vocational Education Learning Format to Comply Hopefulness in Companies and Industries

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### ABSTRACT

The companies and industries were very demanding manpower not only must be prepared to work in accordance with their competence but also that very important of them was the work attitude should be good. In fact, currently it was not so because of any manpower that was when received as worker. The study presents the concept of vocational education learning format model that appropriate and comply hopefulness of companies and industries. The method used the literature review, interview, creation of the competency-based learning program of work in companies and industries. The results have shown that the model of learning format was vary and depending on the characteristics of the subject of course to be achieved and attitude learning applied in every learning. Implementation of learning format model should be supported by together from education leadership and head of companies and industries in achieving the goals and benefits together.

#### 1. Introduction

The vocational education is a higher education diploma program that prepares students to work with particular expertise applied to the applied bachelor program (Lows of Indonesia Republic No. 12 2012). In the explanation of Article 16 to paragraph one which states that the vocational education is education that preparing student to become professional with skill or ability of high work. It has historically identified with their internship in the workplace that the learning process conducted by observation, imitation and personal correction, not by the application of a preposition common in classrooms and through textbooks (Moodies, 2008). It is concern on the development of vocational education practical ability, practical knowledge, and understanding of certain jobs (UNESCO Institute for Statistics 2010). Vocational education study program of engineering faculty is the unit of education and learning activity that has curriculum and specific learning method in one type of vocational education under clumps of engineering science in the faculty of engineering (Regulation of Education and Culture Minister of Indonesia Republic No. 49 2014).

Coherence and relevance of skill or ability to work from the process result of mechanical engineering vocational education with the companies and industries were the major factor of priceless human resources

for a community that will promote economic growth and prosperity public (Arifin, 2014). According to direct observation by interview to the directors in several companies and industries such as: Automotive Machine Shop, PT. Telkom, Electronics, Tourism and Hospitality, Building Contractors, Food and Beverage, and Coconut Oil Industry where there are the gap especially in terms of attitude between the student competence (not only current practice or industrial internship but also already graduated and worked) and the ability to work. The attitude shown by some student of field work practice (PKL) or internship industry and graduate or manpower was still lacking so well thus the results of work that obtained far from the expectation of com-panies and industries (actually expectation of companies and industries was the work of student and manpower must be professional and can benefit their business). Base on Presidential Decree No. 8 (2012) on Indonesian Qualification Framework (KKNI) that learning achievement is the ability obtained by the internalization of knowledge, attitudes, skills, competencies, and accumulation of work experience. It is useless for the companies and the industries if student of PKL or industrial internship and graduate or manpower) have high of the ability to internalize the knowledge, skills, competencies, work experience but very low of the ability of attitude (Rifandi, 2013). Also, according to the results of directly interview to the heads of vocational education study program in FT-UNIMA that attitude element included in the creation of learning outcome in the curriculum that created by Decree of National Education Minister of Indonesia Republic No. 045 (2002) and created in 2003, Laws of Indonesia Republic No. 12 (2012), Indonesian Presidential Regulation No. 8 (2012), and the draft Regulation of Education and Culture Minister of Indonesia Republic on National Standard for Higher Education (creation of the 2013 about revision of curriculum based on KKNI) (The Education and Culture Ministry, General Directorate of Higher Education and the National Education Standards Agency 2013), and the lectures had already applied.

Competency standards are minimum criteria concerning the qualifications of graduates capabilities that include attitudes, knowledge, and skills are expressed in the formulation of graduate learning outcomes (Regulation of Education and Culture Minister of Indonesia Republic No. 49 2014). The attitudes are correct and cultured behavior as a result of internalizing and actualizing the values and norms reflected in the spiritual and social life through a learning process, student work experience, research and/or community service related learning. The attitude formulation can be added by universities, proposed to the Director-General to set into the learning achievement of graduates, assessed and determined by the Director-General as a kind of study program. The fulfillment of graduate learning outcomes for each course the learning process must facilitated by forms of learning such as lectures, responsiveness and tutorials, seminars, lab, studio practice, practice workshops, or field practice, research, and community service. The elements of attitudes in the learning achievement of graduates must become very important elements in the learning process through the container forms of learning, but the problem is how the model of a learning program with elements of at-titude becomes a key element in the learning process of each course in vocational technical school? And how do the implementation?

The problem was particularly important for the companies and industries which really need student that practice or industrial internship, and graduate or manpower has the attitude that suitable with minimal standard of good when they were doing the job.

The aim of this study is to get the concept of vocational education learning format model that appropriate and comply hopefulness of companies and industries.

# 2. Method

The beginning, we did library research, direct interview to the director in several enterprises fields of automotive engineering workshop in the province of North Sulawesi such as Automotive Machine Shop Company, PT. Telkom, Electronics, Tourism and Hospitality, Building Contractors, Food and Beverage, and Coconut Oil Industry. Then, we conducted direct interview to the heads of the vocational education study program in FT-UNIMA such as: Mechanical Engineering Education, Education Electrical Engineering, Engineering Education Building, Education Information and Communication Technology, and Education and Family Welfare. We analyzed the interview results, conducted decision-making, and created a solution through the creation of form model for learning in all subjects. Finally, we planned the implementation to subject of PKL/industrial apprenticeship in the Vocational Education Study Program FT-UNIMA on Academic Year 2016-2017 second semester.

#### 3. Results and Discussion

The result of analysis from the directly interview to the directors in several enterprises in the province of North Sulawesi indicated that all the directors have the problems in the elements of attitude as the main element that owned by the student and manpower who currently working was poor performance. It was very interfere in achieving goal of corporate especially to produce the profits (Batalla-Busquets & Pacheco-Bernal 2013).

The attitude such as the behavior that not right in the job, for example the workers were often violated the discipline of the company (in and out of working time was not timely, damage and not keeping the infrastructure company, work arbitrarily, sometimes dishonest, lacking respect among fellow workers, never willing to follow orders from seniors). Also, they had knowledge, skills, competencies, and the accumulation of work experiences is a good average.

We made the model form of learning for next implementation which refer to a form of learning such as lectures, responsiveness and tutorials, seminars, labors, studio practices, practice workshops, or field practices, researches, and community services. Then, in the learning process, the selections of learning very depend on the material characteristics learning each course.

Figure 1 shows the scenario of the learning process for one meeting on a subject which the emphasis on the process of internalizing and actualizing values and norms are reflected in the spiritual and social life, especially in the working environment in the enterprise. It contained the formulation of attitudes according to attachment of Regulation of Education and Culture Minister of Indonesia Republic No. 49 (2014) as: (1) be cautious to God Almighty and be able to demonstrate religious attitude; (2) uphold the human values in the line of duty based on religion, morals, and ethics; (3) contribute to improving the quality of life of society, nation, state, and the progress of civilization based on five precepts; (4) acting as a citizen of pride and patriotism, nationalism and a sense of responsibility to the state and nation; (5) respect for cultural diversity, views, religions, and beliefs, as well as the original findings of an opinion or any other person; (6) cooperate and social sensitivity and concern for the community and the environment; (7) obeying the law and discipline in the life of society and state; (8) internalized the values, norms, and academic ethics; (9) show a responsible attitude to work independently in the automotive field; and (10) internalize the spirit of independence, innova-tion, effort, and entrepreneurship.

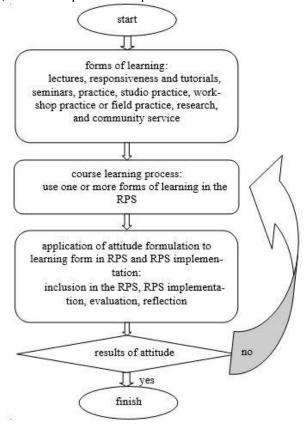


Figure 1. The scenario of learning process for one meeting on a subject

In the preparation of semester learning plan (RPS) formulation attitude (in the application) are translated into steps of learning activity (opening activity, main activity, and closing activity). The process of drafting RPS referred to article 12, paragraph 3 of the Regulation of Minister of Education and Culture of Indonesia Republic No. 49 (2014) and Indonesian Presidential Regulation No. 8 (2012). During the process of learning activities conducted observation (monitoring) to student and lectures to measure the achievement of attitude elements. At the end of the main activities, we evaluated by using the attitude scale questionnaires. After learning of one meeting, we evaluated and reflected as the basis for developing a learning plan of next meeting.

The minimum standard of attitude that expected from the results of the learning process is the attitude that developed when someone worked in the companies and industries that provides a positive evaluation of someone on the aspects of the work environment of them (Robbins & Judge, 2007). In a job in companies and industries, the most important of the attitudes should be developed are job satisfaction, commitment of organizations or enterprises, and job involvement, so that what is expected from the enterprise to the problems of someone's attitude when doing the work can be solved and resolved (Akhtar at al. 2016).

Implementation of learning form that involves companies and industries must be supported by strong global leadership education and business entities in achieving a goal and the advantages of each, so that the expectations of business and industry can be met and that the perpetrators of street vendors and workers can be good at her job (Lamsa et al. 2008). If it conducted, then interactive cooperation between academic activity in the FT-UNIMA with the activity of companies and industries has been good.

#### 4. Conclusion

The model forms of learning are varied and depending on the material characteristic of the subjects to be achieved that base on the formulation of attitudes according to attachment of Regulation of Minister of Education and Culture of Indonesia Republic No. 49 year 2014 about National Standard for Higher Education which in the application of learning are elaborated into steps of learning activities. The results of the implementation of the model forms of learning by focusing on the application of the attitude learning in each subject can comply hopefulness for the companies and industries when student were on PKL and graduate student as manpower are working.

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