

The teacher's role in increasing employability skills of the drawing building engineering vocational high school students

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Abstract

The process of preparing students on vocational education that includes the development of skills, competency, understanding, attitudes, work habits and the appreciation needed by workers to enable them to work successfully in their fields should be of interest to educators in vocational education institutions. Early observations of science and the emphasis on authentic assessment suggested that the 2013 curriculum for vocational high school is a renewal or innovation of the previous curriculum. The research is done through descriptive-qualitative re-search method. The population in this study is all teachers of vocational subject vocational competence of building drawing techniques in Bantul Regency. The technique of collecting data through an interview, observation, and documentation, data is analyzed to get a description about research object. The results showed that the selection of strategies and learning approaches should be studied closely, especially in relation to their relevance to learning missions, learning objectives, students' potential and characteristics, and environmental resources. Vocational teachers have at least four important roles in developing students' employability skills, namely the role of teachers as demonstrators, as mediators, as evaluators and as competent individuals. Implementation of the 2013 curriculum learning on the competence of building drawing techniques from several previous studies can be concluded to be implemented adequately.

Keywords: Drawing building engineering, Employability skills, Teacher's role.

Abstrak

Proses mempersiapkan siswa pada pendidikan kejuruan yang mencakup pengembangan keterampilan, kompetensi, pemahaman, sikap, kebiasaan kerja dan penghargaan yang dibutuhkan oleh pekerja untuk memungkinkan mereka bekerja dengan sukses di bidangnya harus menarik bagi para pendidik di lembaga pendidikan kejuruan. Pengamatan awal ilmu pengetahuan dan penekanan pada penilaian otentik menyarankan bahwa kurikulum 2013 untuk SMK adalah pembaruan atau inovasi dari kurikulum sebelumnya. Penelitian ini dilakukan melalui metode penelitian deskriptif-kuantitatif. Populasi dalam penelitian ini adalah seluruh guru mata pelajaran kejuruan kompetensi kejuruan teknik menggambar bangunan di Kabupaten Bantul. Teknik pengumpulan data melalui wawancara, observasi, dan dokumentasi, data dianalisis untuk mendapatkan deskripsi tentang objek penelitian. Hasil penelitian menunjukkan bahwa pemilihan strategi dan pendekatan pembelajaran harus dipelajari dengan cermat, terutama dalam kaitannya dengan relevansi mereka dengan misi pembelajaran, tujuan pembelajaran, potensi dan karakteristik siswa, dan sumber daya lingkungan. Guru kejuruan memiliki setidaknya empat peran penting dalam mengembangkan keterampilan kerja siswa, yaitu peran guru sebagai demonstran, sebagai mediator, sebagai evaluator dan sebagai individu yang kompeten. Implementasi pembelajaran kurikulum 2013 tentang kompetensi teknik menggambar bangunan dari beberapa penelitian sebelumnya dapat disimpulkan untuk dilaksanakan secara memadai.

Kata Kunci: Keterampilan kerja, Peran guru, Teknik menggambar bangunan.

INTRODUCTION

The current role of vocational education, including Vocational High School (SMK), is not just limited to provide workers, it must also be able to prepare students to become self-reliant and responsible societies. Preparation is the adoption of a holistic approach from the aspects of knowledge, skills, and attitudes towards the development of employability skills. Forming alumni into independent and responsible community members with educational programs that emphasize value development, ethics, and behavior. SMK should be able to increase the competence of students at a higher level. The training helps the trainee to capitalize his interests and abilities to the highest possible degree (Prosser & Quigley, 1957).

In line with the statute of Law number 20 of 2003 on the national education system which states "vocational education is secondary education that prepares students primarily to work in a particular field". According to Thompson (1973), the American Vocational Association has defined vocational education as education designed to develop skills, abilities, understandings, attitudes, work habits, and appreciations needed by workers to enter and make progress in employment on a useful and productive basis. The process of preparing students for the vocational education that includes the development of skills, competency, understanding, attitudes, work habits and the appreciation needed by workers to enable them to work successfully in their field must be the role of educators in vocational education institutions.

According to Law number 14 of 2005 regarding Teachers and Lecturers Article 4 asserts that teachers as learning agents serve to improve the quality of national education. The function and role that is very strategic in the development of education are in the teacher's capacity, therefore need to be developed as a dignified profession. Pedagogical competence is one of the requirements for teachers to teach well. The government and by various parties who care about learning in school has done of Improved quality of learning programs, include: (1) teacher upgrading; (2) teacher education qualification; (3) curriculum renewal; (4) implementation of new learning model or method; and (5) research on students' difficulties and mistakes in learning frequently done by teachers such as classroom action research.

The curriculum 2013 is also dedicated to link and balance soft-skills and hard-skills and accommodating the principles of contemporary learning (Hadiprayitno, 2016). Some of the principles of innovative learning in the Curriculum 2013 which is a paradigm shift from the previous curriculum are: (1) teachers are not the only source of learning so learners learn from various learning sources; (2) students are facilitated to find out rather than be in-formed; (3) the learning process uses a scientific approach; (4) learning that emphasizes divergent answers that have multi-dimensional truths; (5) utilization of information and communication technology to improve the efficiency and effectiveness of learning, as stated in Chapter I of the MOEC regulation number 65 of 2013.

Efforts to build and revitalize vocational education are also contained in Presidential Instruction number 9 of 2016 (Setneg, 2016) and on September 6, 2017, President Joko Widodo has signed Presidential Decree number 87 of 2017 on Strengthening Character Education (Setneg, 2017). The Presidential Decree for Strengthening Character Education is an education movement under the responsibility of educational unit to strengthen the character of learners through harmonization of the heart, taste, thought, and sport with involvement and cooperation between education unit, family, and society as part of the National Movement of the Mental Revolution.

This Presidential Decree has the objectives: (1) to equip students as the gold generation of Indonesia in 2045 with Pancasila spirit and good character education in order

to face the dynamics of future changes; (2) to develop a national education platform that lays character education as the main spirit in education for the learner with the support of public engagement through formal, informal, and informal education with respect to Indonesian cultural diversity; and (3) The Presidential Regulation also aims to revitalize and strengthen the potential and competence of educators, education personnel, students, community, family environment in implementing Strengthening Character Education.

The results of research from Abbas, Kadir, & Azmie (2013) shows that 75% of job success is determined by soft skills and only 25% is determined by hard skills. According to Lankard (1990), educators at vocational schools should adapt to change and information, in developing and educating students especially in vocational schools. Knowledge of employability skills becomes important owned by SMK teacher so that SMK graduate students also have this ability. Employability skills as a skill that allows one to get a job or to keep working, including personal skills, interpersonal skills, attitudes, habits and behaviors (Overtoom, 2000).

Responding to the demands of employability skills for SMK graduates, regulation of the Minister of Education and Culture number 23 of 2016 asserts that the Curriculum 2013 requires the use of authentic assessment (MOEC, 2016). Paradigmatically authentic assessment requires the realization of authentic instruction (authentic instruction) and authentic learning (authentic learning). Gulikers, Bastiaens, & Kirschner, (2004) defines authentic judgments as judgments requiring learners to use the competencies of knowledge, skills and behaviors they master and apply in solving their professional life problems later, where the level of authenticity of a judgment will depend on the level of resemblance to the situation it will face in the real world. Thus, authentic assessment is very relevant to the characteristics of learning in SMK that must prepare graduates to be able to work in the real world of community life in a professional manner in the field of expertise.

The characteristics of education to be undertaken in SMK is to equip the learners with a variety of cognitive skills and vocational-technical skills and equip it with various soft skills (attitude, soft skills, employability skills, or generic skills) required in work (Sudjimat, 2009). The results of the research (Hadiprayitno, 2016) show the response of teachers of building engineering program of SMKN in Yogyakarta to the principles of learning Curriculum 2013 is "Agreed" with approval level of 76, 25%. This means that teachers believe that the principles of learning according to the Curriculum 2013 will be implemented to produce more competent graduates in building engineering skills.

RESEARCH METHOD

Research method on employability skills development analysis on the competence of building engineering skill of SMK in Bantul district. This research is conducted through descriptive-qualitative research method, which is a method that observes, analyzes and describes the phenomenon that occurs in learning on building drawing competence in Bantul then explores the data of each element, activities include: planning, organizing, actuating, controlling and factors which have contributed to the coaching of teachers' professional abilities. Researcher collect data in the form of interviews, documentation, and observations, the data and information obtained are then organized and analyzed in order to get a description of the object of research. The data will be analyzed more deeply to form a natural scientific conclusion can be accepted by various circles, especially in this case is Vocational High School with the competence of Building Materials Engineering skills.

RESULTS AND DISCUSSION

Results

The Result of research are (1) profile of the working period of the teachers of drawing building engineering at SMK was shown in Table 1.

Table 1. Teachers working period profile

School	Teachers working period (years)			
	0-5	6-10	11-15	16-20
SMK N 1 Sedayu	0	2	4	0
SMK N 1 Pajangan	0	2	3	1

The teachers' education level Bachelor as many as 7 people, Master as many as 5 people. (2) the number of students SMK N 1 Sedayu, class X = 59, class XI = 54, class XII = 31 for students SMK 1 Display class X = 57 classes XI = 68 Class XII = 67 average graduates last three years more than 50% work according to drawing building engineering competency (3) Teachers as a demonstrator. The interview result showed that as a teacher, he or she needed self-development as an effort to improve ability and competence herself. The learning process approaches according to the demands of the curriculum. (4) Teachers as mediators and facilitators. He or she needed to learn and practice of development of science and information to understand and master them. Mastery of instructional media is needed as a complementary tool and learning resources for students. Teacher self-development is done to improve the communication skills, there are activities undertaken by teachers to encourage good social behavior, develop personal interaction style, and foster positive relationships with students. Including the development of employability skills students. (5) The teachers as an evaluator. Various evaluation or evaluation activities are intended to know whether the objectives that have been formulated are achieved or not, and whether the material taught is sufficient. The form of objective assessment that is mandated by the curriculum encourages the teacher to be able to photograph the students' overall competence in both technical skills and employability skills (basic skills / Thinking skills / personal skills) of the students. (6) Teachers as Competent Persons, teachers always become good role models for students, a measure of norms of behavior in the eyes of students. Teachers fully master the competence that is taught both knowledge and attitude skill.

Discussion

Labor users often complain that workers from graduates of educational institutions who do not possess good employability skills generally cannot stand the world of work are dishonest, get bored, unable to work together, and cannot communicate orally and write well.

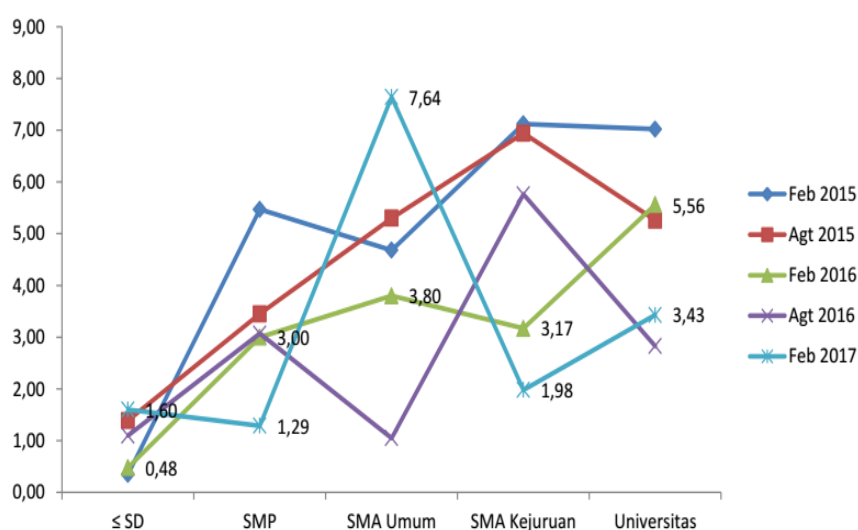


Figure 1. Open unemployment rate data D.I. Yogyakarta (BPS, 2017)

School as one of the instruments and tools of the state as an organization used to achieve educational goals. The role of vocational school prepares students to work in a particular field. The above data shows the role of SMK in encouraging economic growth by continuing to push the unemployment rate.

The purpose of vocational education cannot be separated from the role of teachers in running the curriculum set by the government. Teachers have a role to facilitate the active learning process that can generate interest and ability of students in optimizing their potential. It is important for teachers to have competencies and act effectively as one of the keys to the success of a learning process. Teachers and instructors in the 21st century are teachers and instructors who have learning skills and innovative skills in the field of study and pedagogy/andragogy field (Sudira, 2015). Teacher quality refers to all teacher-related characteristics that produce favorable educational outcomes (Cochran-Smith, 2005).

The preparation of students to have the technical skills and skills that are generic (employability skills) stem from the quality of the implementation of the learning program (Wu, 2005). The results from several studies indicate interacting factors in the learning process including learning system. Educators must have the capacity and capability in understanding the learning model, thus providing opportunities for students to develop their maximum learning creativity and train their independence. Education with learning how to learn every student should be encouraged to have the ability and understanding of how to learn and be able to continually explore information for strengthening self-capacity (Hardika, 2014). The selection of strategies and learning approaches should be carefully examined, especially in relation to their relevance to learning missions, learning objectives, students' potential and characteristics, and environmental resources.

The opinion of Rasul, Rauf, & Nor (2014) concludes that the major skills required by the industry and firm are strong interpersonal skills, such as communication skills; problem-solving skills; teamwork and entrepreneur skills; and project and work process oriented. Principles of learning in the implementation of Curriculum 2013 for SMK drawing building engineering competency has accommodated the demands of innovation skills and employability. The scientific approach to learning and the emphasis on authentic assessment recommended in the Curriculum 2013 for Vocational Education is a renewal or

innovation of the previous curriculum. Furthermore, the 2013 curriculum is intended to balance soft-skills and hard-skills and accommodate the principles of present learning, so that teachers have an important role in developing basic skills, thinking skills and guarding the development of personal skills of students.

The authentic self-assessment model can be developed to assess the cognitive, affective, and psychomotor aspects. Problem solving and self-management are part of the cognitive and affective structure of the learning process. Meanwhile, a psychomotor structure is shown by the ability to make database application conceptually and logically. This model has met the basic principles of appraisal, namely the principle of validity, the principle of reliability, focused on competence, comprehensive, objectivity principles, and educational principles. Based on the results of the trial can be concluded that the ability of problem solving and self-managing ability of students in both categories, as well as competence achievement to design database applications conceptually and logical including high category.

CONCLUSION

The results showed that the selection of strategies and learning approaches should be studied closely, especially in relation to their relevance to learning missions, learning objectives, students' potential and characteristics, and environmental resources. Vocational teachers have at least four important roles in developing students' employability skills, namely the role of teachers as demonstrators, as mediators, as evaluators and as competent individuals. The implementation of the 2013 curriculum learning on the competence of building drawing techniques from several previous studies can be concluded to be implemented adequately.

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