

# Impact of Vocational Curriculum 2013 on the Role of Vocational School Graduates in Industrial Construction Services

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**Abstract—** Competing the curriculum of learning undertaken at vocational level is a step that is being undertaken today in its efforts to respond to global challenges both internally and externally. The impact of the competence of graduates to be more in line with the needs of the industry, especially services Construction Industry. Priority to working in the Construction Services Industry, graduates must have certification of skills from BNSP and LPJK. In building image competence, SMK graduates are directed to Drafter According to the scheme in SKKNI. The action not only as a picture reader in the field but can also be used to help the completion of drawings Shop Drawing and As built drawings in accordance with the units of competence that is hinted.

**Keywords:** *learning strategy, vocational higher education, industrial revolution 4.0, summer camp*

## I. INTRODUCTION

The predicted demographic dividend can increase the potential for productive human resources in Indonesia, is expected to take control of national development and can fill the labor needs of ASEAN. Winangun (2017) "vocational education should be able to meet the demands of the knowledge society (knowledge society) in the era of the creative economy". In the field of construction, building vocational school graduates can not meet kebutuhan workforce with good quality (Isnandar; 2012, Jatmoko; in 2013, Yusof et al; 2012, Mastura et al; 2013). Revitalization become one of the steps to prepare for the productive potential of qualified human resources. Construction education sector was also preparing to overhaul its quality potential of the vocational curriculum building techniques in order to adjust the development of the construction world. But the destruction has not been a positive impact seen. SMK role in the building industry has been regulated in SKKNI, but unknown to students. This is a problem that needs to be appointed to find a solution, whether maintaining the image or block the majors majors picture and concentrate on field performance skills as a supervisor or the like. Existence membership program more dominant image than other skills program in civil engineering majors. So courses that can potentially meet the needs of the industry will

gradually disappear. Like courses that have opened in the name konsturksi technology, sanitation and maintenance of buildings. Revitalization is expected to answer these problems This is a problem that needs to be appointed to find a solution, whether maintaining the image or block the majors majors picture and concentrate on field performance skills as a supervisor or the like. Existence membership program more dominant image than other skills program in civil engineering majors. So courses that can potentially meet the needs of the industry will gradually disappear. Like courses that have opened in the name konsturksi technology, sanitation and maintenance of buildings. Revitalization is expected to answer these problems This is a problem that needs to be appointed to find a solution, whether maintaining the image or block the majors majors picture and concentrate on field performance skills as a supervisor or the like. Existence membership program more dominant image than other skills program in civil engineering majors. So courses that can potentially meet the needs of the industry will gradually disappear. Like courses that have opened in the name konsturksi technology, sanitation and maintenance of buildings. Revitalization is expected to answer these problems Existence membership program more dominant image than other skills program in civil engineering majors. So courses that can potentially meet the needs of the industry will gradually disappear. Like courses that have opened in the name konsturksi technology, sanitation and maintenance of buildings. Revitalization is expected to answer these problems Existence membership program more dominant image than other skills program in civil engineering majors. So courses that can potentially meet the needs of the industry will gradually disappear. Like courses that have opened in the name konsturksi technology, sanitation and maintenance of buildings. Revitalization is expected to answer these problems.

## II. DISCUSSION

Program design skills and building information modeling is a program that is expected to print kealian graduates who understand, apply, analyze, and evaluate building construction drawings. The Director General of Primary and Secondary Education No. 130 / D / KEP / KR

/ 2017 About Curriculum Structure of Vocational Secondary Education has decided that the building engineering expertise program superseded by engineering construction and property, thereby changing paradigms of learning all there is. Program design skills in addition to building information modeling and the learning image supplied buildings are also eligible for cost estimation learning, application software for the interior design, construction drawings bridge to entrepreneurship.

#### **A. Program design expertise and Building Information Modeling**

Program design skills and building information modeling into program development expertise of engineering drawing program more applicable building customized needs of the industry (the Director General of Primary and Secondary Education No. 130 of 2017). In pembelajarannya content there are some subjects retained from the curriculum and building drawings plus some other subjects. In DPIB membership program (Design and Building Information Modeling), there are some productive subjects of mutual support. The lesson among others; Image Engineering, Engineering Mechanics, Fundamentals of Construction and Land Measurement Techniques, Software Applications and Interior Building, Road and Bridge Construction, Construction Cost Estimation, Construction and Utilities Building. In kontenya

#### **B. Competence in BNSP and Curriculum 2013**

Law No. 18 of 1999 on Construction Services mandated labor experts and construction services must have a certificate of membership and or construction skills. So the main factor or dominant factor in supporting the construction labor force is a factor keberlangsungan job career certification (I Jelantik M, et al; 2014).

While the decision of the Director General of Primary and Secondary Education No. 130 / D / KEP / KR / 2017 core competencies in the areas of skills subjects engineering drawings were "Performing the task by using the tools, information, and procedures commonly done and solve a simple problem according to the field and the scope of work in Drafting. Shows performance superior independently with direct supervision by the quality and quantity of work measured according to standards of competence and can be given the task of guiding others ". In the field of image, they hired to finish, duplicate and document images, in accordance with the tools and the required specifications, draw up the software, and print images with the software (BNSP., 2016). In the field of the estimated cost of those so-called estimator or tellers quantity with the task of identifying the work will be counted, counting quantity (quantity) of the required ingredients, counting equipment, manpower and time required, calculate the total cost of the work, calculate the costs of their change jobs, monitoring the implementation of the work, report the results of the work (BNSP., 2016).

#### **C. Role Modeling and Information Design graduate in Industrial Building Construction Services**

Industrial Supplies Skilled Construction Services will is enormous considering the current national

construction very intensively conducted. Skilled labor needs seen at a construction services company with Small qualifications (K1, K2, K3). The role of skilled graduates with certification is required in this qualifying considering the regulations of Law No. 3 of 2017 which signaled konatruksi services company with a small qualification has at least one (1) certified skilled personnel. It is also the fulfillment of these requirements and meet the manpower requirements in the perusahaan. So in the context of the role of vocational school graduates in the world of construction depending on qualifications perusahaanya merki tidka rule out companies with big qualifying (B1, B2) also requires skilled personnel. Draftman power requirements on the construction company part of the implementation of course referring to the drawing Shop drawing creation, and As built drawings. Dna depiction shop drawings As built drawings only refer to the existing skills of the duplicated image by adjusting the circumstances on the ground with the instruction of experts. So when it is implemented with a maximum certified BNSP the competence of skilled personnel can be accounted for according to the National Professional Certification Regulations No. 4 / BNSP.VII / 2014.

Their role or the role of skilled graduates of vocational programs DPIB membership is restricted as Draftman charge of duplicate images that exist in the construction company. Duplication picture was still accompanied by experts in the field of image. For planning and supervision over labor dominated by a certified expert. This is confirmed in the regulations the Ministry of Manpower and Transmigration Republic of Indonesia Number Kep.327 / Men / IX / 2009, which is written in the table gradation com-petence implies that skilled labor level II (vocational school graduates) work according to instructions and work according to SOP that has been run repeatedly. So that the position is not wrong Draftman use of skilled labor under the instruction level II during labor at the top level.

### III. SUMMARY

Program design skills and building information modeling is a program that is expected to print kealian graduates who understand, apply, analyze, and evaluate building construction drawings. But in its performance in the field is still questionable competence. Many companies complain of lack of competence of vocational school graduates with certificates Drafter. Of course, in the performance as a drafter still get pengewasan and instruction of workers who have qualified in the top of him, so the existence of vocational graduates as skilled labor not only as a reader image on the field but can also be used to assist the completion of the image Shop Drawing and As built drawings according with units of competence superbly hinted at.

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