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# MANAGEMENT INSTITUTIONAL ALIGNMENT SMK COMPETENCE TO INDUSTRY

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***ABSTRACT :*** *One of the instruments of the low quality of vocational education that will have an impact on the level of absorption of graduates is productive competency gap, therefore, the strengthening of institutional capacity in the management of the planned alignment of competency, comprehensive and integrated absolutely necessary. This study aims to analysis reinforcement strengthening institutional capacity provided in harmonization productive machining vocational competence with industry competence. The method used in this study is the concurrent triangulation. This research method is a combination of research methods (mixed methods) that combines qualitative and quantitative research. Subjects in the study include: vocational education agency, industry partners and the professional association. While the source of the data in this study is the principal, task force, chairman of the group expertise, middle education head of education department, school inspectors, industrial partners and professional associations. The results showed that: 1) has not been the overall competency of graduates according to the needs of the expected competencies industry; 2) there is still a lack of industry role in the implementation of alignment with vocational competence; 3) the level of absorption of graduates in the industry indicate a trend that continues to decline; 4) cooperation undertaken SMK is absolutely improved; and 5) evaluation is not solely for the evaluation of learning but more emphasis competency evaluation results synchronization. Expected outcomes of this research is the analysis of institutional capacity management productive machining vocational competency alignment with industry competence.*
***Keywords:*** *institutional capacity, alignment, productive competence, machining.*

## I. INTRODUCTION

Vocational education is an education that prepares students to work in a particular field. The basic concept of vocational education has different characteristics with general education in terms of educational criteria, the substance of learning, and graduates. According to Finch & Crunkilton (1984), the criteria that must be owned by the vocational education include: 1) orientation on the performance of individuals in the world of work; 2) justification on the real needs on the ground; 3) curriculum focus on aspects of the psychomotor, affective, and cognitive; 4) the benchmark is not only limited success in school; 5) sensitivity to the development of the world of work; 6) require adequate practice facilities; and 7) the support of the community. Nolker and Shoenfeldt (1983), also revealed that vocational education lesson in choosing the substance must always follow the development of knowledge and technology, community needs, the needs of individuals, and employment. Simon, C. and Maggie, M. (2015), They argue that for effective teaching there must be: 1) student involvement in learning (motivation); 2) an improvement in the teaching/learning climate; 3) reflective teaching (transformative reflection ); and 4) teachers improving their teaching.

The challenges of globalization requires the readiness of workers who have different qualifications to the previous state. With a large labor force, expected to actually be able to adjust in order to have a competitive advantage. But in fact, graduates of vocational schools recognized only by

itself and still lack the confidence of the business and industrial world. SMK still preoccupied with the methods and the development of learning that may have implications on the quality of graduates who have not been able to answer the challenges of the industry, if it is continuously carried out by the school, the school will be left behind and the distance (Waugh, 2004). The same thing as disclosed Slamet (2013: 15-16) that the condition of the current vocational show things as follows: first, most vocational currently only prepare students to work on specific areas of expertise as a worker/employee. Second, vocational less responsive to the demands of economic development locally, nationally, regionally, and internationally.

One of the efforts undertaken to address gaps vocational competence to perform alignment with industry competence. Management of alignment needs to be managed through the establishment of institutions in a planned, comprehensive and sustainable by involving stakeholders. Slamet (2013) revealed that the alignment of competence particularly productive competence between the vocational and the world of work in the dimension of quantity, quality, location, and time, has not formally organized. Although it has been published Indonesian Presidential Regulation Number 8 Year 2012 on Indonesian National Qualifications Framework (KKNI), but the formal container that bridges the world of vocational schools and the world of work yet. In 1994 there was a container that bridges the world of vocational schools and the world of work, namely the National Vocational Education Council (MPKN). MPKN formed through the Joint Decree of the Ministry of Education and Culture and the Chamber of Commerce and Industry of Indonesia on the establishment of the Vocational Education Council No. 0217/U/1994 and 044/SKEP/KU/VIII/94, but now the institute is not active. Whereas the decree also has not been revoked. According Yudiono (2011), one indicator of success in the implementation of productive vocational competency alignment with industry is strengthening the institutional role. Departing from the problems mentioned above, this study focuses on the analysis of institutional strengthening alignment between vocational competence with industry.

## II. RESEARCH METHODS

The method used in this research is the Concurrent Triangulation. This research method is a combination of research methods (mixed methods) that combines qualitative and quantitative research. According to Creswell (2009), concurrent research methods triangulation is a popular method among the methods of other combinations, as to these two methods are used at the same time so that more efficient in terms of time. The subjects used in this study include: vocational, education authorities, industry partners and professional associations. While the source of research data is the principal, task force, head of the expertise, the head of the field of secondary education, the school superintendent, industry partners and professional associations. While the research outcomes are expected to be an analysis of institutional capacity management productive machining vocational competency alignment with industry competence

## III. RESEARCH RESULT

There are two groups of competencies that are important from the productive groups of subjects, namely: 1) Basic Vocational Competence; and 2) Vocational Competence. Vocational Competence contains core Competence. The Core Competence dimension combines the attributes that define the importance of measuring the process in terms of competence, skills, learning, knowledge and leadership (Carlos A. Costa, *et al.*, 2010). The structure of these competencies do not meet the needs of the industry, this is caused by factors such as: 1) the learning laboratorium at school is oriented training; 2) industry is less open about the competencies required information; 3) aligning competency validation is performed only vocational competencies; and 4) the competence of subject teachers have not been able to optimize the productive competence of learners. The crucial factor is the alignment of productive vocational competence with the required competencies industry.

Difficulties faced by the school to realize the required competencies as the industry include: 1) not all industries are becoming a willing partner institutions put through the alignment of competence; 2) the lack of an industry that has a training center and educational work with schools; 3) still a few industries which receive vocational graduates working who has done industry practice in the enterprise; 4) mentor/instructor industry practice lacks insight into science education and 5) the amount of costs to be borne by the school to conduct competency alignment.

The role of industry in the alignment of competence productive machining showed that of the overall industry being only 3.80% SMK partners who are willing to perform the validation of competence productive machining, 3.80% industrial partners act as assessors in Skills Competency Test and industry to work together in labor recruitment by 9.54%. The participation of industry in the alignment of competence productive machining show that: 100% of the industry as a place for Industrial Work Practices and amounted to 30.60% of the industry is doing particularly MoU Industrial Work Practices. While the industry's role in assessing the relevance of productive machining competence as assessor Skills Competency Test average of 3.80%.

Inventory of industrial competence is based on competence acquired productive machining learners through the Industrial Employment Practices shows that not all of the existing competence in the industry do learners during the Industrial Employment Practices. Competence industry often do learners include: 1) conventional lathe (89.58%); 2) milling (72.92%); 3) sney (56.25%); 4) sawing (50.00%); 5) drill (52.08%); 6) grind (54.17%); 7) electric welding work (58.33%); and 8) welding jobs (64.58%). While the subject teachers who have followed the productive machining industry internships and as assessors as follows: 1) industrial internship in the form of On the Job Training as much as 54.05%; and 2) as an assessor Skills Competency Test as much as 22.14%.

Skills Competency Test results for the academic year 2010/2011 amounted to 85.30 increased by 5.26% compared to the academic year 2011/2012 amounted to 89.80. The results of the academic year 2011/2012 amounted to 89.80 increased by 1.79% compared to the academic year 2012/2013 amounted to 91.41. The results of the academic year 2012/2013 amounted to 91.41 decreased by 2.24% compared to the academic year 2013/2014 amounted to 89.36. While the level of expertise of

machining program graduates working industry can be explained as follows: academic year 2010 / 2011 amounted to 82.00% decreased by 10.43% compared to the academic year 2011/2012 amounted to 73.45% . In the academic year 2011/2012 amounted to 73.45% decreased by 2.71% compared to the academic year 2012/2013 amounted to 71.46%. While the academic year 2012/2013 amounted to 71.46% decrease of 7.17% compared to the academic year 2013/2014 amounted to 66.34%.

## IV. DISCUSSION

From the research that has been done to optimize institutional management so far has shown that: 1) yet the overall competency of graduates according to the needs of the industry expected competencies; 2) still lack the role of industries in the alignment with the vocational competence; 3) graduates who work in the industry showed a trend that continues to decline; 4) the cooperation between SMK is absolutely improved; and 5) evaluation is not solely for the evaluation of learning but rather emphasizes the alignment of competency evaluation results. The alignment concepts have been used to modify the evaluation model, standards, indicators, criteria, and alignment index (Pattaraporn, *et. al.* 2015). From the results of these studies show the need for strengthening institutional capacity to draw up a framework aligning competencies.

Krishnamoorthy (2005) reveals the alignment as a process of linking the events and actions of an organization so that the situation occurs at the same time in a predetermined order. Organizations align competencies within the framework of a more dynamic and remain competitive in a global environment so as to get maximum results by synergizing our entire organization. Goldstein (2007) describes the process of alignment as a job "outside in" by also considering the elements outside the organization to see how it is necessary to synchronize and then form an internal organization to serve the needs beyond.

The concept of the development of institutional capacity building framework aligning competencies must consider three main components, namely the demand side, the supply side and the alignment mechanism. In formulating the program is comprehensive alignment takes a picture ahead of some relevant dimensions. Projected needs ahead of the competencies required of the industry and the amount in each industry is indispensable and should refer to the specific characteristics and potential of the industry, for the development plan required information as the basis for forecasting future.

Demand model that is designed to be capable of generating information manpower needs and business opportunities in the labor market and also to provide an overview of functions and the role it should have from the industry. This information can be a reference to the provider of education in planning and adopting the curriculum and other education policies. Education development policies such as: the provision of pre facilities, improving the competence of teachers in educating learners and learning system or the applicable curriculum should be based on the needs competence alignment with industry. Mean while, the supply model must also describe the interaction between the activity of input-process-output desired the functions and roles of the stakeholders are on the supply side.

An alignment mechanism can be designed so as to guarantee the implementation of programs compiled alignment. Alignment mechanism includes three main aspects: (1) the mechanisms associated with the exploration of a number of activities and programs that need to be done so that the information needs of the demand side can be obtained accurately and sustainable; (2) the mechanisms associated with exploration activities and programs necessary for the availability of graduates/work force are ready to enter the workforce and generate employment (entrepreneurship) and (3) a mechanism which ensures the information communication needs of the demand side to the supply side/education.

The formulation of programs related to the management of productive competence alignment should involve all stakeholders. Given this alignment program is a shared responsibility, it is to be more effective and efficient is necessary to determine the functions and roles of each stakeholders. On the supply side, government institutions vocational education and training providers will be responsible for defining the activities and programs related to education. Parties are a lot of plays on the supply side is the Department of Education, for special purpose needs to conduct this type of education or vocational training that is specific to a certain scope. While the demand side which is an important source of information about the needs of the workforce, should ensure the availability of such information. Some instruments need to be designed as a tool for providing information.

## V. CONCLUSIONS

Some things that can be concluded from the study in relation to the strengthening of institutional capacity management competency harmonization productive machining expertise vocational programs with industry competence include:

1. Strengthening the institutional capacity for the management alignment is still facing problems as follows: a) lack of competency of graduates according to the needs of the industry expected competencies; b) still lack the role of industries in the harmonization with vocational competence; c) graduates who work in the industry showed a trend that continues to decline; d) the cooperation between SMK is absolutely improved; and e) evaluation is not solely for the evaluation of learning but rather emphasizes harmonization competency evaluation results.
2. Institutional capacity strengthening is needed to improve the performance of productive machining harmonization vocational competence with industry competence to frame the institutional management with advanced aspects of competence alignment, optimization of industry and stakeholders, empowerment resources, curriculum integration and alignment of learning and performance evaluation.

While some things can be recommended from this study include:

1. Establishment of organizations dealing with the alignment of competencies need to be realized as a vocational with industry and stakeholders.
2. It needs policy support from stakeholders to strengthen the management capacity of the institutional alignment of competency

3. financing support from stakeholders for the implementation of alignment competence as application of the free schools, especially in secondary education.

## REFERENCES


Carlos A. Costa, *et al.* 2010. *Organizational Processes Alignment and Company Strategy within a process management approach: an Assessment Tool*. Management and Control of Production Logistics University of Coimbra, Portugal September 8-10, 2010: ScienceDirect

Finch, Curtis R., and Crunkilton, John R., 1979, *Curriculum Development in Vocational and Technical Education: Planning, Content, and Implementation,* Allyn and Bacon , Inc., Boston

Goldstein, S. 2007. *Timeless Principles for Organizational Success: The Power of Wisdom and Human Values*, *Videoconference Series*, International Training Center.

Krishnamoorthy M., Cardenas MA. and Kumar R. 2005. The Development of An ETK Methodology to Measure Organizational Synchronization, *International Journal of Technology, Knowledge and Society*, Vol. 2: 61-70.

Nolker, Helmut & Schoenfeldt, Eberhard. 1983. *Pendidikan Kejuruan: Pengajaran, Kurikulum, Perencanaan*, Jakarta: PT. Gramedia.

Pattaraporn S., Siridej S., and Shotiga P., 2015. Development Of A Nursing Training Programs Evaluation: An Application Of Alignment Concepts. *Procedia - Social and Behavioral Sciences* 191 ( 2015 ) 748 – 752.

Simon, C. and Maggie, M. 2015. A Constructive Alignment Approach for Assessing Essential Cultural Soft Skills in Tourism. *Procedia - Social and Behavioral Sciences* 191 ( 2015 ) 6 – 11.

Slamet, PH. 2013. Pengembangan SMK Model untuk Masa Depan. *Jurnal Cakrawala Pendidikan.* Februari 2013. Th. XXXII, No. 1: 14 - 26.

Waugh, Toni, 2004, *Patern of Works*, http://www.myfuture.edu.au/

Yudiono, Heri. 2011. *Model Manajemen Sinkronisasi Kompetensi Lulusan SMK Berbasis DUDI pada Kelompok Mata Pelajaran Produktif Program Keahlian Permesinan. Laporan Penelitian* (tidak dipublikasikan). Semarang: LP2M Unnes

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