

TEACHING FACTORY DEVELOPMENT MODEL TO IMPROVE THE PRODUCTIVE CAPABILITY VOCATIONAL EDUCATION STUDENTS

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TEACHING FACTORY DEVELOPMENT MODEL TO IMPROVE THE PRODUCTIVE CAPABILITY VOCATIONAL EDUCATION STUDENTS

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ABSTRACT: Teaching Factory is one of the activities in Vocational Education to produce product that are managed by teachers and students. The main function of Teaching Factory is: to improve student skills and knowledge in the real job conditions, can substitute industries for being a place industrial practices and enterpreneurshif. The purpose of the development Teaching Factory is to increase productive competence abilities of students and school income-generation. The productive competence of the students is reflected in students' ability to finish a job and soft skill. Income generating is intended to supplement school operating expenses and improve the welfare of teachers and schools. The research results showed that the teaching factory development model implemented is based on: 1) oriented to the consumer needs, 2) human resources capabilities, 3) infrastructure and equipment effectiveness, 4) project-based learning, productive development, 5) increased students' ability through training, and 6) development of marketing through print and electronic media.

Keywords: teaching factory development model, productive competence, income-generating

1. Introduction

The National Employment census 2007 stated that only 5 percent of the number of labor force Indonesia who are interested in entrepreneurship (Purna et al., 2016). This is a problem for the SMK graduates. in the meantime the number of SMK graduates are encouraged to reach 70:30 in 2015 (Dikmenjur, 2007). Thus the activities of vocational education should also be directed so that graduates are capable of entrepreneurship through the program production unit

Implementation and development of vocational school is based on the philoshopi essentialism, existentialism and pragmatism. Constructivism views that knowledge is not about the world, but rather 'constitutive' of the world. Knowledge is not a fixed object, it is " constructed by an individual through her own experience of that object (Sherman (Hsiao, Lin DW, 2010: 2). This theory states that the knowledge and skills obtained through the integration between the transformation and grasping experience.

Vocational education functions as well as learning center, a business center and business development for the community (Dikdasmen, 2005). It can be done by establishing production units as a means of learning, entrepreneurship and other operating expenses of the school. (Direktorat Pembinaan SMK, 2007:1).

Development of production units using the theory of workplace learning, situated cognition and constructivism (Engeström and Gröhn, 2004: 1) and (Lin Hsiao, 2010: 2) and Experiential learning (Kolb, 1999: 2). The actual experience is important

in the development of knowledge and skills of students.

Based on the concept of situated cognition, situated learning and experiential learning above then teaching factory in the vocational educational needed to improve the quality of teaching and learning. Thus students can learn about real conditions, working in teams, finding and serving the consumer, carrying out activities of production results and market discipline, train, the intensity of student learning and be able to evaluate the quality of the product

2. Research Method

This research is research development with mix method model. Data collection using the instrument's observations, inventory, and interview. Data analysis using the logical framework analysis.

3. Result

The results of research development Teaching Factory model are as follows:

3.1 Development Model of teaching Factory:

- The implementation of unit development production was done with the following steps:
- 1) Identified the ability of science knowledge and skills of students and teachers productive in vocational education
 - 2) Identified community needs against products and services
 - 3) Identified the availability and adequacy of the school's facilities and infrastructure to be able to carry out activities of teaching factory

- 4) Planning a project-based learning to produce goods/services
- 5) Trained students in accordance specifications expertise in dealing with the possibilities of the problem in the Teaching Factory
- 6) Development marketing unit production by developing a media marketing such as brochures, banners and more.

Model development of teaching factory is as illustrated in Figure 1 and 2

- b. The productive ability of students educational vocational:
The productive ability of students educational vocational in the implementation of production units is the ability of hard skills (average value 77.2) and the ability of soft skill-related team work, communication skills, and interpersonal relationship is shown in table 1

Table 1. The ability of Soft Skill Students Executive Production Units

No	Aspect	indicators	Results
1	communication skills	able to discuss, give opinions and asked	Students are able to cooperate well in completing the work, such as in the face of difficulties which can not be solved yourself then not hesitating to discuss with friends and the teacher's Companion
2	ability in team work	cooperation in a team in the work	Students are able to conduct cooperation with team in solving problems and finishing the job with a division of tasks and in completing the work
3	commitment in work	are serious about completing the work	Students trying to finish the job until it is done and as quickly as possible by making use of free time
r4	Time management	management of the time using time effectively	students are able to do the job in earnest so that it can be completed according to target or consumer needs.
5	Leadership	encourage friends to participate actively, help friends resolve issues	Students ' ability in finding friends who can be invited to carry out the activities of the production units and the ability to set the time of activity
6	Kreative thinking	find new metode to solve the problem	Indicated as a result of creativity thinking of students is to find ways of how to find and fix damage to tools/goods
7	Management of stress	manage stress	Yet it appears the result because for existing students the job does not have implementatioipressures because students feel no difficulty

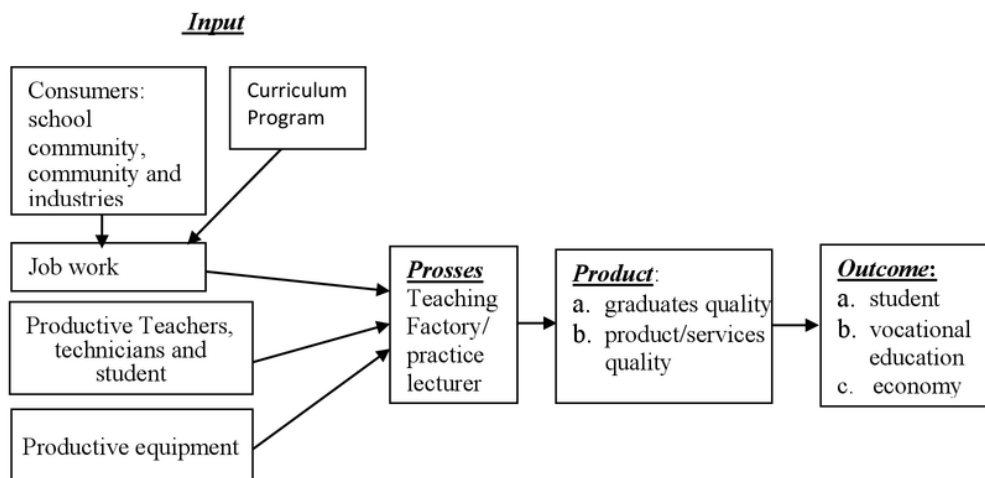


Figure 1. The Scheme Teaching Factory Model

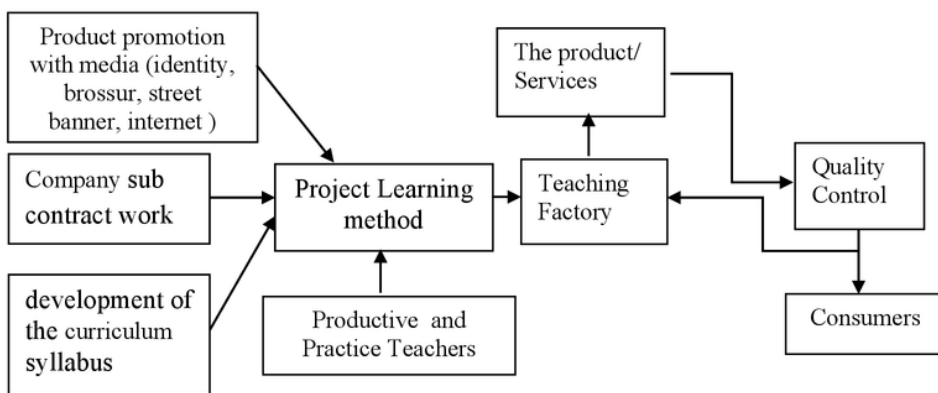


Figure 2. The Implementation of Scheme Teaching Factory Activities

Discussion

Success in the development of The Teaching Factory model in vocational education is indicated by the availability of the following factors: a) the human resources professional, b) means the appropriate infrastructure, and c) results of the marketing product/service. Human resources professionals are associated with the ability to manage and carry out activities of Teaching Factory. Infrastructure is related to suitability to exercise the process of production. Marketing is very important as it is related to the circulation of products/services produced, so that failure in marketing can make the production process stop. In addition the ability to the market products and services through media such brochures, banners and internet is important in order to get noticed.

The ability of teachers in making learning activity design in the form of production became important in integrating between learning activities based on curriculum reference (syllabus) and production activities. A project method used in teaching activities of the teaching factory with the aim of enabling students to become active, independent and responsible in completing the appropriate product/service standards. This is in accordance with the theory of experience learning (Kolb and Mainemelis, 1999), work place theory (Lin Hsio, 2010) and constructivism philosophy (Engeström dan Gröhn, 2004)

Cooperation with industry can be done at the internship program so that teaching factory can be promoted together with the production partner. Student success in the activity of production units appear on productive upgrades as well as the cultivation of the students' entrepreneurial soul, because students with mentoring teachers engage fully in the activities of the production process/service thus providing a real learning experience

Production system with accompaniment and control by the teacher in the activity of production units able to produce the product/service standards of consumer products. This indicates that the productive capability of the students becomes better. The results of the production process can not be separated between discipline, teamwork, time management, creativity, communication with friends and companion, stress management and motivation to produce the best product/service standard, consumers will produce graduates who have the ability of productive, soft skill and entrepreneurial soul.

Conclusion

Development of Model teaching Factory is adjusted to the capabilities of human resources and infrastructure. Implementation of the activities of the production/service can be done by students with teacher mentoring. Products/services produced students in accordance with the standards that are expected of the consumer. The Teaching activities of the factory were able to increase the productive ability of the soft skills of students. Production Activities in Teaching Learning project using model Factory. Last but not least it is dependent upon marketing media used such brochures, banners and internet.

References

- Dikdasmen. (2005). *Garis-garis besar program pendidikan menengah kejuruan*. Jakarta: Direktorat Pembinaan SMK Direktorat Jenderal Manajemen Pendidikan Dasar dan Menengah Depdiknas
- Dikmenjur. (2007). *Panduan pelaksanaan th 2007, imbal swadaya smk model*. Jakarta: Direktorat Pembinaan SMK Direktorat Jenderal Manajemen Pendidikan Dasar dan Menengah Departemen Pendidikan Nasional.

Direktorat Pembinaan SMK. (2007). *Panduan pelaksanaan th 2007, imbal swadaya smk model*. Jakarta: Direktorat Pembinaan SMK Direktorat Jenderal Manajemen Pendidikan Dasar dan Menengah Departemen Pendidikan Nasional.

Engeström dan Gröhn. (2004). Workplace learning and developmental transfer. Diambil pada tanggal 28 Juni 2010 dari www.edu.helsinki.fi/behav/english/index.html

Ibnu Purna, Hamidi, Prima. 2010. Mengharmonisasikan Tenaga Kerja dan Pendidikan di Indonesia Kamis, 14 Januari 2010

Kolb, D.A, Boyatziz, R.E., Mainemelis, C. (1999). Experiential learning theory: previous research and new direction. Diambil pada tanggal 8 Agustus 2009 dari <http://www.d.umn.edu/~kgilbert/educ5165-731/Readings/experiential-learning-theory.pdf>

Hsiao, Lin, W.D. (2010). CSCL Theories. Diambil pada tanggal 12 juni 2011 dari <http://www.edb.utexas.edu/cscl/Dhsiao/theories.html>

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