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Submission date: 27-Apr-2020 06:43AM (UTC+0700)

Submission ID: 1308484604

File name: 19. Related Between Vocational Secondary School (SMK) With Job Availibility in Central Java.docx
(2.64M)

Word count: 5676

Character count: 31724

PROCEEDING

THE 8th INTERNATIONAL CONVENTION OF INDOONESIAN ASSOCIATION
OF TECHNOLOGICAL AND VOCATIONAL EDUCATION (APTEKINDO)
AND 19th INDOONESIAN CONGRESS OF FT/FPTK-JPTK

978-602-7486

August, 3-6 2016
Medan, Indonesia

Published :

**Faculty of Engineering State University of Medan
Association of Technological and Vocational Education
(APTEKINDO) - 2016**



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA



RAVTE
Rural Association for
Vocational Education
and Training

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EDUCATIONAL TECHNOLOGY AND VOCATIONAL IN ASEAN ECONOMIC
COMMUNITY, INTERNATIONAL CONFERENCE PROCEEDINGS

3-6 August 2016

Auditorium State University of Medan, Medan, North Sumatera, Indonesia

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FACULTY OF ENGINEERING
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EDUCATIONAL TECHNOLOGY AND VOCATIONAL IN ASEAN ECONOMIC COMMUNITY,
INTERNATIONAL CONFERENCE PROCEEDINGS

ISBN:

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Published by:
Faculty of Engineering
State University of Medan
pn. wmem Iskandar, Psr V Medan 20222;
Telp (061) 6636757; Fax. (061) 6613319-6614002
Website: [http/ /www.aptekindo.unimed.ac.id](http://www.aptekindo.unimed.ac.id)

In Collaboration With:
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Preface

We feel thankful to Allah for the blessing so that the book ⁹proceeding of National Seminar completely compiled in relating to the 8th National Convention of Indonesian Association of Technological and Vocational Education (APTEKINDO) and 19th Indonesian Congress of Fr/FPTK-JPTK3 - 6 August 2016 in State University of Medan.

The main objectives of ¹the seminar is to improve the capability in vocational technology in theme: The role of educational technology and vocational in Asean Economic Community (AEC) which is adopted from the researches in order to upgrade the graduates to be International standard so that the output of LPTK-PTK be able to compete in AEC. Therefore, the National seminar, convention and workshop of Indonesian LPTK-PTK may emerge the thoughts how to strength the role of LPTK to improve the quality of the vocational teachers in Indonesia

Hopefully this proceeding book will be useful to develop technology, art, and culture. This book also can be as a reference to intensify the National development

The committee would express our gratitude to all participants and stakeholders in supporting the National seminar, convention and workshop of Indonesian LPTK-PTK

Medan, 6 August 2016
Chairman,

⁸

Prof. Dr. Abdul Hamid K, M.Pd.
NIP.19580222198103.1001

Content

Proceeding Identity
Preface
Content

Keynote Paper

Globalization of Human Resource Management: The Challenges of Reforming Vocational Education and Training

By: Prof. Dr. Jailani Bin Md Yunos (Vice President of RAVTE Faculty of Technical and Vocational Education Universiti Tun Hussein Onn Malaysia)

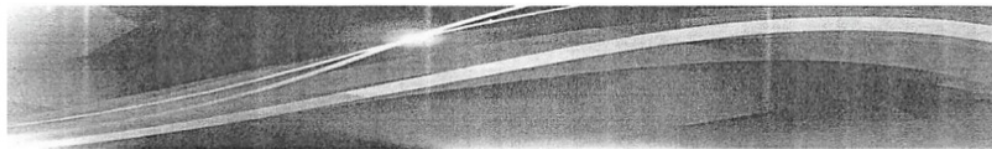
Main Paper

The Role of Vocational Education and Training in Technological Innovation, Entrepreneurship and Productivity Improvement through Technology Transfer and Knowledge Development

By: Fuad Paul Forghanif The University of Queensland St. Lucia QLD 4072 Australia)

The opportunity and challenge of vocational education in facing Asean Economic Community (AEC)

By: Dr. Bruri Triyono, M.Pd. (Dean of Engineering Faculty UNY)



DAFTAR ISI

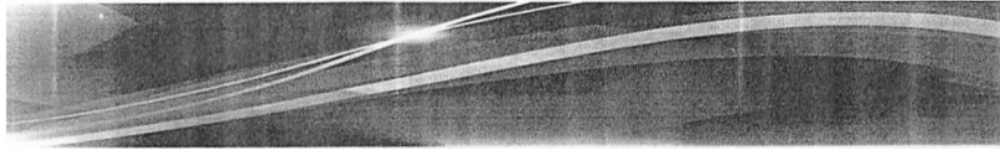
Prakata	i
Susunan Panitia..... ii
Daftar Isi	v
Sub Themat ² : Capacity Development of Technical and Vocational Teachers	
EI-01-001 An Overview of Vocational Education Training in Germany <i>D. Prastiyanto, State University of Semarang</i>	
EI-01-017 ANALYZE THE CONSTRUCTIVIST APPROACH RADICAL AND SOCIAL CONSTRUCTIVISM IN THE RELATIONSHIP BY USING THE IMPLEMENTATION CAREER.LEVEDN THE VOCATIONAL EDUCATION <i>Haryadi, Iskandar, Dicky Nofriansyah, State University of Padang</i>	
EI-01-008 IMPLEMENTING PROJECT-BASED LEARNING (PBL) IN FINAL COLLECTION TO IMPROVE THE QUALITY OFFASHIONDESIGN STUDENT <i>Indarti, State University of Surabaya</i>	
EI-01-016 THE ROLE OF COSMETOLOGY LABORATORY IN PREPARING COMPETENT GRADUATES <i>Dewi Iutfiati, State University of Surabaya</i>	
EI-01-012 REDEFINING VOCATIONAL TEACHERS COMPETENCE: IMPLICATE TO PREPARE VOCATIONAL TEACHERS CURRICULUM IN INDONESIA <i>Wagiran, Yogyakarta State University</i>	
EI-01-015 THE IMPROVEMENT OF LEARNING INTEREST AND MASTERY ON WOODEN TRUSS PLANNING USING TEAMASSISTEDINDIVIDUALJZATJON LEARNING METHOD <i>Sri Handayani, don Rini Kusumawardani, State University of Semarang</i>	
EI-01-018 OPTJMIZATJONOF STUDIO LEARNING SYSTEM FOR ARCHITECTURE STUDENTS <i>Teguh Prihanto, State University of Semarang</i>	
EI-01-003 APPLICATION OF ANALYTICAL HIERARCHY PROCESS (AHP) METHOD FOR TEACHERS PERFORMANCE EVALUATION VOCATIONAL HIGH SCHOOL (SMK) <i>Yenny Desnelita, don Irwan, State University of Padang</i>	
EI-01-009 USEFULNESS OF DRILL AND PRACTICE STRATEGY FOR EDUCATION OF PRE- SERVJCE VOCATIONAL TEACHER <i>Lutfiyah Hidayati, State Universityof Surabaya</i>	
EI-01-005 PARADIGM OF INNOVATION AND MANAGEMENT OF TECHNOLOGICAL AND VOCATIONAL EDUCATION IN INDONESIA <i>Yoto, State University of Malang</i>	





- EI-02-098 THE EFFECTIVENESS OF IMPLEMENTATION LEARNING MODEL WITH WORK VALUES EMBEDDED FOR JUNIOR HIGH SCHOOL STUDENTS
Muhammad Yahya, State University of Makassar
- EI-02-103 THE IMPROVEMENT OF LEARNING INTEREST AND MASTERY ON WOODEN TRUSS PLANNING USING TEAM ASSISTED INDIVIDUALIZATION LEARNING METHOD
Sri Handayani, & Rini Kusumawardani, State University of Semarang
- EI-02-104 THE APPLICATIONS OF PSYCHOMOTOR DOMAIN LEARNING STRATEGIES AT VOCATIONAL HIGH SCHOOL
Edy Suprpto, University of Nusa Cendana
- EI-02-105 LEARNING E-LEARNING IN HIGHER EDUCATION BASED LEARNING MANAGEMENT SYSTEM (LMS)
Lita Sari Muchlis, State University of Padang
- EI-02-034 ¹ MEDIA DEVELOPMENT BASED LEARNING INTERACTIVE MULTIMEDIA SKILLS SUBJECT CRAFTS
Dina Ampera & Efnarayi Artania Siagian, State University of Medan
- EI-02-106 THE INFLUENCE OF LEARNING STRATEGY AND THE TYPE OF PERSONALITY AGAINST LEARN RESULT IN THE FIELD OF MATHEMATICS IN LESSON YEAR OF 2013-2014 (Experiment Study at SMK II Manado)
Djubir Ruslan Edy Kembuan, State University of Manado
- EJ-02-107 COMPLAINT SYSTEM IMPLEMENTATION OF PATIENTS HOSPITAL TREATMENT OF SERVICE USING SMS GATEWAY GAMMU
Febriyanno Suryana & Erdisno, Putra Indonesia University
- EI-02-087 THE COMPABILITY LEVEL OF FACILITIES AND INFRASTRUCTURE OF LABORATORIUM TO STUDENTS' MANUAL ENGINEERING DRAWING IN SMK NEGERI 2 PURWODADI
Agung Sutarto, State University of Semarang
- EI-02-086 COMPETENCE IMPROVEMENT BY ASSIGNMENT METHOD ASSISTANCE GROUP BASED ON COURSE OF WOODEN STRUCTURE II IN STUDY PROGRAM SI PTB
Endah Kanti Pangestuti & Sri Handayani, State University of Semarang
- EI-02-088 RELATED BETWEEN VOCATIONAL SECONDARY SCHOOL (SMK) WITH JOB AVAILABILITY IN CENTRAL JAVA
Yeri Sutopo & Mursid Zuhri, State University of Semarang
- EI-02-108 ⁶ TASK INTERPRETATION TO IMPROVE THE STUDENTS' LEARNING OUTCOMES OF FAMILY WELFARE SCIENCE COURSE
Iuthfiyah Nurlaela & Ita Fatkhur Romadhoni





EI-02-088

RELATED BETWEEN VOCATIONAL SECONDARY SCHOOL (SMK) WITH JOB AVAILABILITY IN CENTRAL JAVA

Yeri Sutopo¹ and Mursid Zuhri²

¹Jurusan Teknik Sipil FT Universitas Negeri Semarang; ²Balitbangprov Jawa Tengah

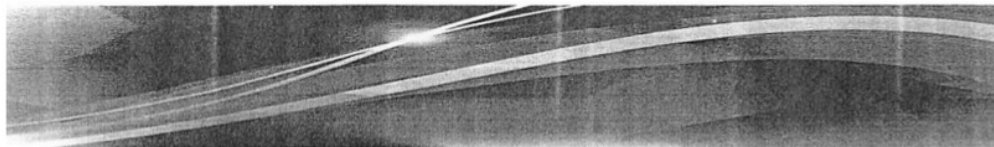
ABSTRACT: This research aim to provide information concerning: (1) education management in SMK in area of Engineering (wooding, electronics, electricity, mechanic, and automotive); (2) policy implementation "link and match" which have been done by SMK in area of Engineering (wooding, electronics, electricity, machine, and automotive); (3) the number of and abilities of SMK's graduate in area of Engineering (wooding, electronics, electricity, mechanic, and automotive); (4) the condition of need and labour absorbtion in the industry which relate to SMK's graduate in area of Engineering (wooding, electronics, electricity, mechanic, and automotive); and (5) the execution of certification which is committed by SMK, industry and Lembaga Sertifikasi Profesi (LSP). This research uses qualitative method. This research data Source in the form of people, document, or laboratory. Data Source which in the form of people are head of school, the head of BKK, the representative of school head, the teacher of theory and also the practice, and industrial staff HRD. Document are in the form of text, picture, film, imprint, and or sketch. Laboratory which in the form of workshop, room in laboratory with and equipment which is in it. Laboratory which stays in the school, industry, or workshop which is used PRAKERIN by student. The result of this research indicate that (!) prakerin done by SMK in Central Java in average uses block system. But system used was not folly block model or can be told as modification block system. Industry as a rule is not able to execute competence test. Industry is only capable gives certificate as signal completing it, nevertheless in it have been equiped by values of student skill; (2) the number of graduates SMK in Central Java between 95% up to 100%, of spread of pass absorbent to employment which fitt in with programme its expertise is 30% up to 50%.; waiting time gets first job in average is 1-6 months; (3) SMK's graduate required by industry is manual tool mechanic operator, CNC's machine operator, electric welding, argon weld, metal moulding and ICT, despite in requiring soft skill is in the form of assiduity, commitment, discipline, and ability of team working; (4) student expertise certificate SMK in Central Java is obtained through three ways, that are Prakerin, PTA, and competence test carried out by LSP or BNSP. Certificate obtained of execution of Prakerin and certificate obtained of PTA is used as UN complement. Meanwhile, certificate obtained of LSP is additional supply of student for the agenda of applying. Key word vocational education, Prakerin, job availability.

1. INTRODUCTION

Vocational education management, including Sekolah Menengah Kejuruan (SMK) now entering important phase, that is vocational training graduate phase will be at stake readiness of its, in labor chess in the Asian regional region, either in context Asean Free Trade Association (AFTA) and also Asean Free Labor Association (AFLA). Attempt which must be done is to do maximum settlement and correction it may be in vocational education sector, either settlement in pattern of recruitment, education program development and training or curriculum, process of innovation education and training, evaluation development and certification (Suryadi, 1999).

Important issue which must be always placed forward in this context is bow big SMK in parallel and relevant with need of public, especially need of labour, corporate world and also industry. In popular language, bow big and strong "link and match" between both of it. If these basic question answered, then in its bottomsides are form of any vocational training will very "matching" and support need of corporate world or industry, especially in the skillful graduate supply.





Fact in the field now indicates that vocational education management and training running with its own program, on the other side of world of industry and profession association often complain that quality of graduate does not fulfill expertise demand which expected. Phenomenon "mismatch" between vocational educational institutions and training with corporate world, in the end engender graduate "underqualified". The situation is getting worse like this it has been a long time happens, even till now (Samsudi, 2004).

Phenomenon "mismatch" between expertise programs SMK in Central Java with corporate world now still also felt, including wooding expertise program, electronics and electricity, mechanical, and automotive (PELMO). Phenomenon above showing existence of paradox between pre-eminent expertise program decidings with fact existence of "mismatch", so that coming up question how in fact quality of PELMO's expertise program education management SMK in Central Java?

Interrelationship between educations with need and availability of employment in the industry are combination of influence between regulator variables, the participant of education, education organizer and world of job. Interrelationship between that variables have the character of reciprocal, and individual influential to other variable. participation lameness or Involvement actively in one of variables, for example education organizer variable can cause system does not work optimal which will be result relation between education and world of inharmonious job, its meaning in physical will happen unemployment in with continuation.

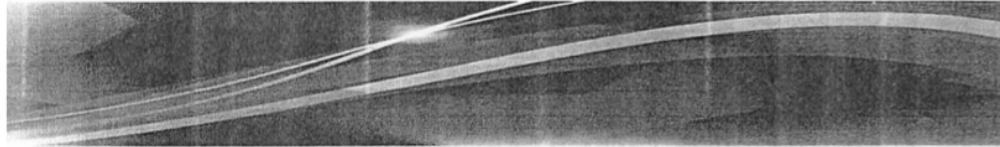
Based on description above, then the purpose of research is provide information concerning: (1) Management Prakerin in SMK in area of PELMO's study; (2) number of graduates SMK in area of PELMO's study; (3) the execution of certification which is committed by SMK, industry and Lembaga Sertifikasi Profesi (LSP) and (4) the condition of labour need in the industry which relate to graduate SMK in area of PELMO's study.

II. METHOD

This research have the character of descriptive, inductive, the more obstrusive of process and meaning, and report is designed in the form of narration, and deep. However this research also uses its datas of character are quantitative, for example in the form of statistical values and crossed tables. So this research using qualitative method. This research data Source can be in the form of people, document, or laboratory. Document can be in the form of text, picture, film, imprint, and or sketch. Laboratory can be in the form of room practice of, in laboratory with and equipment which is in it. Laboratory can stay in the school, industry, atapun workshops which is used practicing apprentice by student and teacher of the practice.

Informan is data source which in the form of people, that is man who expected to can give description required to complement or clarify answer of research subject. At this research informan sometime also act as research subject. Information authenticity is not enough if only comes from an





informan, therefore, information is collected of some informants which understand widely and in research subject.

This research subject is interrelationship between education with manpower. Therefore, this research subject is school and industry along with management are in it. If this research subject is curriculum then informant related to this thing is Principal, the deputy of school, the management of Bursa Kerja Khusus (BKK) and the teachers which there in the that going to school. If research subject is laboratory, then informant which competence is head of workshop, teacher, foreman, and student. This research committed in the school, industry, and interconnected government agency directly with manpower. Going to school taken as population is SMK, especially PELMO. Location determination bases assumption that having SMK advanced and supported by existence of industries in harmony with programme PELMO's study, covering 10 locations in Central Java, that is Magelang, Surakarta, Salatiga, Klaten, Kudus, Banyuwangi, Cilacap, and Kendal. Industry taken as research population can stay in Central Java and also outside of Central Java. The Institute of government in this research are Disnakertrans and Dinas Pendidikan Provinsi and also Kabupaten/Kota.

Fact and data which will be collected in this research all kinds of, therefore required by method and instrument which varying also, for example is technique in and interview sheet, technique in and observation sheet, check list, and documentation.

Data authenticity fully supports in determining research end result, on that account, the technique to check data authenticity is utilize something else outside data for or comparison at data have been collected. Data authenticity in this research checked with using technique in source triangulation. Triangulation this means comparing and checking back of reliability of a information obtained through different time and equipment.

In process of data collecting, the involvement of researcher becomes a very important thing and determine in data collecting. The involvement of researcher required when which relatively old with a purpose that data collected becoming saturate. The extension of involvement means researcher to stay in the research field to data collecting saturation is reached. If this thing done then will limit (1) researcher trouble to context, (2) bias, (3) of atypical or errant events.

Data processing in this research committed through four phases, that is (1) data collecting, (2) reduction of data, (3) data menu, and (4) conclusion withdrawal or data verification. That those four steps explained in Figure 1.



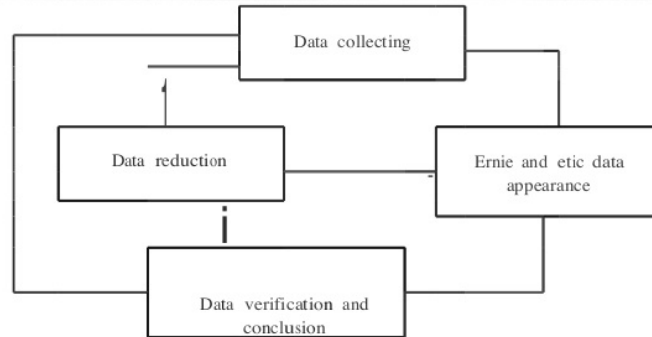
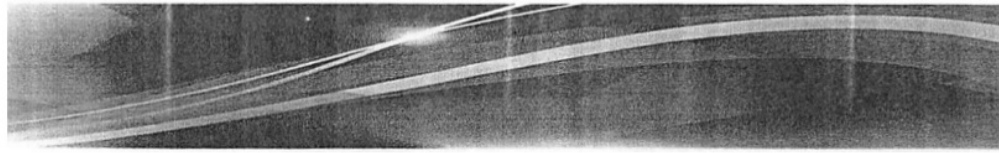


Figure 1. The path of data analytical technique

III. RESULTSAND DISCUSSION

A. The execution of Prakerin in Some SMK's in Central Java

In SMK Mikael, curriculum development is not done with industry outside campus. its meaning curriculum synchronization is done internally together with Akademi Teknik. Mesin Industri (ATMI). In the this campus, school has company or industry, common called also as "production unit". production unit of its character has this manufacturing labored order from outside. SMK Mikael does not require input of industry outside its production unit. However, at recently, SMK Mikael performs synchronization indirectly is at time of them pay a visit in Pabrik Rokok Gudaog Ga.ram Kediri, that their students ought to learn also about industrial electricity. This input accommodated in curriculum, presently have been taught in SMK Mikael.

SMK Mikael Surakarta has production unit integrated with productive subject learning in the school. Since 2002 schools obtained ISO 9001-2000's certificate. going to school also believed to become Sister of Indonesian German Institute (IGI) for quality of development human resource in Indonesia through ³Program Pendidikan SMK and Social Grassroot Training Center (SGTC). Despite, school has guarantor team quality of, that is Academy Technique in Machine Industrial (atmi.) SMK which has cooperation with corporate world and industry, production unit, ISO.

SMK Mikael's student does not execute apprentice within reason of student other SMK..Now apprenticeship is called as activity of Prakerin. SMK Mikael's student executes Prakerin in the school production unit which its mechanism is 5 students is sent to production unit during the three weeks, then replaced next group 5 students also during the three weeks. The execution of Prakerio like this called as by block system, that is 3 weeks in the etcetera production unit in the theory class.

The execution of Prakerin at expertise technique in wood SMKN 2 Salatiga and SMKN 2 Kendal in doing at first semester in the class three for full three months in the industry. The execution of Prakerio is done in two phases that is first phase in July up to September; and phase of both months





of November up to January, day the arrangement and Office hours is accommodated with agreement between schools with industry.

Before execution of Prakerin in the industry, student obtained stock purchasing of school and industry. Usually this activity committed in the school. Industry is invited to school to give understanding to student concerning their industrial profile, and image of student activity at time of is in the industry. Despite, is related also ethics, working safety and order during the execution of Prakerin. Stock purchasing is done for two days.

The execution of prakerin in SMK 2 Salatiga and SMKN 2 Kendal to expertise program technique in wood use block system. its meaning Student for three months staying in the wood industry, there is no activity of pembelajaran in the class, student staying around industry, as a rule is room rent. This system used in a hope that skill obtained in the industry is not annoyed by subject there in the school, so that expected by the obtained skill is comprehensive. After period of three months is fulfilled student is returned to school. In the following page presented by management model prakerin committed by expertise program technique in wood SMK 2 Salatiga and SMKN 2 Kendal. The activity of monitoring which is committed going to school only done once for three months, this thing committed in a hope that school does not disturb process of learning in the industry. Despite guide of school usually asks about resistance which is experienced by student in the industry. School can ask the thing to industry, does student of its school experiences problems, ethics, morale or spirit of job? The teacher does not have authority to give assessment to student. The activity of assessment is done fully by industry.

B. Number of and Abilities of Graduate SMK to Central Java

In SMK Mikael Surakarta unsuccessful student is promoted to the next higher grade in 0,8% and happen to school year 2005/2006, while in school year 2004/2005 and 2006/2007 unsuccessful students are promoted to the next higher grade in are zero %. Average UN Bahasa Inggris last three years (2004/2005, 2005/2006, and 2006/2007) successively 6,82; 8,04; and 8,29. Average UN for subject of Matematika last three years (2004/2005, 2005/2006, and 2006/2007) successively 7,75; 7,68; and 8,23. last Graduate percentage four years (2004, 2005, 2006, and 2007) successively 95%; 97,5%; 100%; and 100%.

In SMK Mikael Surakarta number of last graduates four years (2004, 2005, 2006, and 2007) which fills employment opportunities as according to its study program successively 43 people, 57 people, 59 people, 60 people. The rest more or less 50% graduates of year 2004, 2005, 2006, and 2007 continue to college. Majority to ATMI Surakarta, Universitas Sanata Dharma, Universitas Atmajaya Yogyakarta, and a number of country colleges. the waiting period to get first maximum job of 1-3 months. despite labour request by industry for last four years (2004, 2005, 2006, and 2007) successively 42 people, 50 people, 43 people, and 50 people. the request can only fulfilled 10 people, 16 people, 13 people, and 15 people, so that there is request surplus 32 people, 34 people, 30 people,





and 35 labour people. so, the many graduates absorbent by world of kerjaada is surplus. despite, waiting period gets job which relatively short is good practice management.

At UN year 2008 SMK 2 Salatiga successfully pass 100% with value which satisfying. The lesson of mathematics : its average value is 8,87. The lesson of Bahasa Indonesia average value the whole is 8,02, while for lesson of English, average value is 8,08. This news really proud and gladdening for all academic person civity SMK Negeri 2 Salatiga. So, in the year 2008, SMK 2 Salatiga having average number of students which pass above average number of students which pass in Central Java. This thing indicate that process of learning in SMK 2 Salatiga in good category. Shown also that in every year percentage of number of students channeled to place of job always increasing that is starting from 47%, 55% and final datas are 66%. This thing strengthens suspect that learning which running tend to lead to ability claimed by curriculum.

Expertise competence test year 2007 become part of UN for the SMK's students. in previous year, UN for SMK only covers three subjects, namely mathematics, Bahasa Indonesia and Bahasa Inggris; while expertise competence test enters in general examination. so value of UN for SMK comes from value of mathematics is added with value of Bahasa Indonesia, the value of Bahasa Inggris and value of expertise competence test is divided by four. UN's expertise competence is carried out slowest one week before implementation of UN theory.

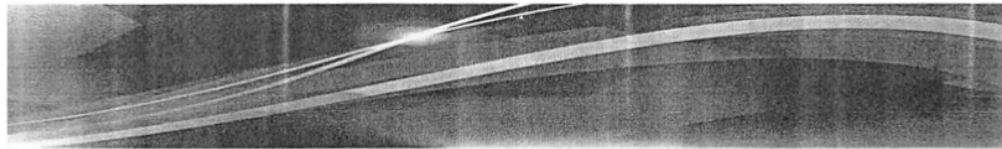
Technique in wooding in SMK 2 Salatiga gets believe of Pusat Pengembangan Penataran Guru (PPP-G) Teknologi Bandung as place of execution Uji Kompetensi Siswa (UKS). 18 students prove expertise in making furniture with industry standard. The result of their direct work assessed as by some furniture company management staff. "We are able to produce wood energy readily absorbent by industry. In Indonesia there's only five SMK's elected as this competence test executor, one of them this our school," said Kepala SMK 2 Salatiga, Drs Reza Pahlevi.

C. Certification Management SMK In Central Java

Expertise certificate obtained by student SMK Telkom Sandhy Putra Purwokerto through three ways, that is through Pendidikan Sistem Ganda (PSG) or often called by Prakerin, through project of Tugas Akhir, and through competence test carried out by LSP BNSP. Certificate obtained of execution of PSG and certificate obtained of PTA is used as UN complement. its meaning both certificates enter in result of UN. Meanwhile certificate obtained of LSP is additional supply of student for the agenda of applying.

Certificate obtained of PSG through steps as follows: (1) student executes PSG in PT. TELKOM; (2) student obtains value of PT. TELKOM; (3) student compiles report of PSG; (4) student tested by schools relate to report of PSG; (5) student is expressed to pass report of test PSG; (6) assessing obtained of PT. TELKOM and report of test PSG is average; (7) student obtains certificate. the Letter of this description signed or legalized by head of Kantatel and head of school.





PTA is national productive test approach by the end of period of education in SMK..., which is integration and actualization to acquisition of competence or sub competence which have been mastered. This strategy designed to increase efficiency and the relevance of. Testing this type competence come into internal category. through this PTA expected by student is able to create learning situation which conducive to produce product as according to need of market, the requirements of standard quality of, and procedure operational standard (SOP).

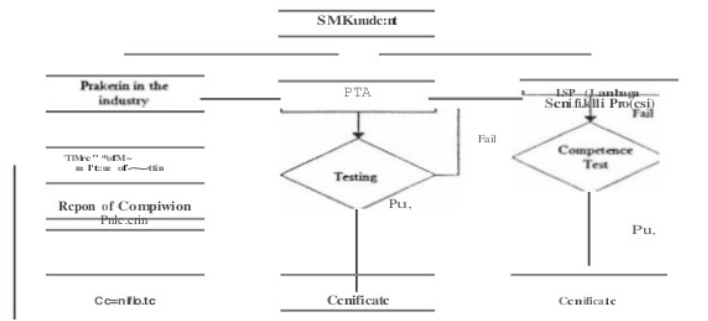


Figure 2. Process and various certification SMK in Central Java

The product of PTA is accommodated with characteristic of package or expertise program, which can be in the form of: (1) the product of goods, for example Program Sistem Informasi Akademik based on Web, programme on-line PSB, in the area of agriculture, in the area of artistry, and others; (2) the product of service for example server installation, Mail server, Gateway, local network installation for internet booth, survey technical field and mapping, automotive, and others. The execution of activity PTA through some individual steps are (1) proposal compilation; (2) the process of execution; (3) the activity of culmination; (4) the process of verification; and (5) certificate gift.

In phase of proposal compilation, the teacher and tester along with determining a title of PTA, then followed up with design compilation working of PTA. The process of execution is process of activity which is committed as according to fringes have been decided in proposal, with guidance and supervision. Processing this stresses at competence attainment proved with proof learning (learning evidence) and organized in portfolio as component of verification. The activity of culmination PTA by tester can be done by presentation, examination way, and display product. Processing internal and external verification to acquisition of tester competence is done by the end of process of project of execution al tasks to obtain an academic diploma by portfolio verification, proposal presentation way, interviewing, demonstrating and job performance. The final step is certificate gift that is activity after being committed by external verification. PTA's certificate legalized by external verification which usually is PT. TELKOM and Principal.





Expertise certificate obtained by SMK St. Mikael Surakarta through two ways, that is through prakerin and through project of PTA. Certificate obtained of execution of PSG and certificate obtained of PTA is used as Ujian Nasional's complement. its meaning, both certificates are input as value of UN.

Certificate obtained of prakerin through steps as follows: (1) student executes prakerin in the property of industry institution; (2) student obtains value of result of prakerin; (3) student compiles report of prakerin; (4) student tested by schools relate to report of prakerin; (5) student is expressed to pass report of test prakerin; (6) student obtains certificate.

PTA is approach UN productive lesson final period of SMK's education, which is integerasi and actualization to acquisition of competence or subkompetensi which have been mastered. this strategy designed to increase efficiency and the relevant of testing this type: competence come into internal category. through this PTA expected by student is able to create pleasing learning situation to produce product of matching with need of market, the requirements of standard quality of, and SOP.

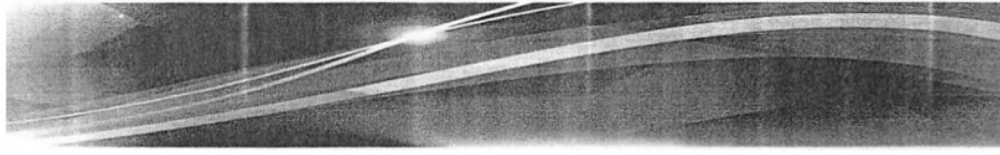
The execution of activity PTA through some individual steps are (1) proposal compilation; (2) processing execution; (3) the activity of culmination; (4) processing verification; and (5) certificate gift.

In phase of proposal compilation, teacher and tester along with determining PTA's title followed up with design compilation working PTA. processing execution is precess of activity which is committed as according to fringes have been decided in proposal, with guidance and supervision. processing this stresses at competence attainment proved with study result (learning evidence) and organized in portfolio as component of verification. the activity of culmination PTA by tester can be done by presentation, examination way, and display product. processing internal and external verification to acquisition of tester competence is done by the end of process of project of execution al tasks to obtain an academic diploma by portfolio verification, proposal presentation way, interviewing, demonstrating and job(activity short exchange. the final step is certificate gift that is activity after being committed by external verification.

D. The condition of Need labour e PELMO Graduate In Industry

According to Head of HRD PT. KOMATSU Jakarta that in the year 2014 and 2015 PT. KOMATSU have received heavy equipment order very big. The need of huge heavy equipment suspected as is not speculative consumer behavior, but is real need in the field. Staff HRD PT. KOMATSU tells that now happening problems 'Bottle Neck 'in the production, because area of labour production machine the numbers a few of so that its pekerjaas heap, he must soon do 'setting up labour to reached by job(activity effectivity. Heaping happens because components still harsh have many are produced, but area of mystical power production machine was not able to counterpoise its. Despite, important components of heavy equipment cannot be labored by hand of human, but must be labored mechanically, but skilled man power in the field of production machine still very limited





therefore happens heaping. Therefore, is required by manual tool machine operator energy and machine operator Computer Numerical Control (CNC) very big. On the other side, PT. KOMATSU requires also the skillful graduate energy in metal moulding.

According to staff ³ HRD PT. Karya Hidup Santoso's (PT. KHS) Yogyakarta, number of graduate operator labours SMK 800 people. they spread over into various jobs for example weld, tool, metal moulding, and painting or finishing. the average of SMK's graduate job quality fulfills requirements of product, its meaning alumna has skill which is enough. all operators still just always given by training, before they worked to produce product, the duration two weeks up to two months. told hereinafter that the very required in job is personal quality, its meaning man which hold firmly commitment, discipline, and capable work along. based on this thing, pengalaman till now thus SMK's alumna which has categorizing ordinary run of the mill having better quality, this thing suspected by them trying harder to increase its job quality of earning.

Usually PT. KHS receives employee every month up to 30 people of various skills. Huge need is in the metal moulding. Despite need for Computer Numerical Control (CNC)'s machine operator or weld robot and machine also very big. Metal moulding even does not require graduate of this expertise program, all expertise programs is received, after they become employee then educated in this skill in the company.

According to staff HRD's is told also that the especially of candidate of employee is personal quality or qualification. Employee character which has assidinity, commitment, discipline, and capable work along the more required. Skill which still rather low, by company will be improved through training. So in fact supply which comes from school is enough for supply work in PT. KHS.

According to Fornulatrix Salatiga's director, monetary global crisis does not give impact to its corporate activity who moves in the field of industry telematika. According to Kepala Bidang Perindustrian, Commerce, and UKM Salatiga area of telematika still become industrial development good player in its city. Telematika the meant is integrasi between telecommunications systems and informatics recognized with Information and Communications Technology (ICT)'s. This industry relate to computer, telecommunications, or multimedia. The skill which still very required by it in harmony with curriculum at expertise program ³ Teknik Komputer and Jaringan in SMK Telkom Shandy Putra Purwokerto.

IV. CONCLUSIONS AND SUGGESTION

A. Conclusions

Firstly, Prakerin done by SMK in Central Java in average uses block system. But system used was not fully block model or can be told as modification block system. At pure block system, the execution of prakerin for eight months, but in its practice many which executing for three months only. The execution of prakerin for three this monthes are minimum requirements, if it dilaksanakan





more than three months and suggested by curriculum. Some schools execute prakerin up to six-month there even exist which up to a year,

Second, number of graduates SMK Negeri and private sector in Central Java between 95% up to 100%, of spread of pass absorbent to employment which fit in with programme its expertise is 30% up to 50%.; waiting period gets first job in average is 1-6 months; the rest continues to Perguruan Tinggi, and partly unknown its activities;

Third, Sertifikat student expertise SMK Negeri and private sector in Central Java is obtained through three ways, that is Prakerin / PSG, The project of Tugas Akhir (PTA), and competence test carried out by Lembaga Sertifikasi Profesi (LSP) Badan Nasional Sertifikasi Profesi (BNSP). Certificate obtained of execution of Prakerin/PSG and certificate obtained of PTA is used as Ujian Nasional's complement. Its meaning both certificates enter in result of UN. meanwhile certificate obtained of LSP is additional supply of student for the agenda of applying;

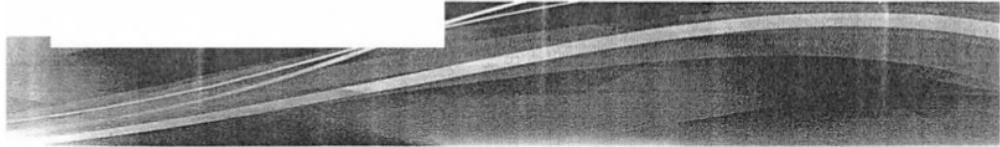
Fourth, SMK PELMO's graduate required by industry is manual tool machine operator, CNC's machine operator, electric welding, argon weld, metal moulding and telematika or ICT, despite in requiring soft skill is in the form of assidinity, commitment, discipline, and ability work along (team work).

B. Suggestion

Firstly, model Prakerin for SMK can be used block release modification, that is performed to start class one by the end of even semester, for a month in three years, especially for skill does not claim systematic matter sequence, number of time of apprentice remain to be for three months;

Second, PTA compiled by student better come from industry where prakerin, student is asked to observe one of problems in the industry to be finalized in PTA, the next step is tester PTA one of them having to come from industry where student prakerin; be not like which till now done that is PTA does not relate to prakerin.





REFERENCE

- Oepdilnas, 2001, *Reposisi Pendidikan Kejuruan Menjelang 2020*, Jakarta, Ditjen, Dikdasmen, Dit Dikmenjur.
- Dunn, William, 2004, *Public Policy Analysis : An Introduction*, Prentice Hall, Simin & Shuster Company Engelwood Clifts, New York.
- Finch, Curtis R. and Crunkilton, John R., 1984, *Curriculum Development in Vocational and Technical Education: Planning, Content, and Implementation*. Boston: Allyn and Bacon, Inc.
- Gusrizal 2002, "Pelaksanaan Uji Kompetensi SMK dan Implikasinya pada Instrumen Mata Uji" dalam *Buletin Pembelajaran No. 02 Tahun 25 Juni 2002*.
- Nolker, H., 1983, *Pendidikan Teknologi Kejuruan Pengajaran, kurikulum, dan perencanaan*, Jakarta, PT. Gramedia.
- PP No. 23 Th. 2004 tentang "Badan Nasional Sertifikat Profesi", *Lembaran Negara R.I. Tahun 2004 No 78, Tambahan Lembaran Negara R.I. No. 4408*.
- Purwadi, A. 1998, "Beberapa Gagasan tentang Reformasi Pendidikan Menengah Kejuruan" *Kajian Pendidikan dan Kebudayaan No. 014/V/September 1998 Jakarta, Balibang, Depdikbud*.
- Samsudi, 2004, "Pengembangan Model Sinkronisasi Kurikulum Berbasis Kompetensi Produktif SMK Bidang Rekayasa", *Laporan Penelitian Hibah Bersaing XII, Lembaga Penelitian UNNES*, Semarang.
- Sukarto, 1938, *Perencanaan dan Pengembangan Kurikulum Pendidikan Teknologi Kejuruan*, Jakarta, Proyek P2LPTK.
- Suryadi, A., 1999, *Pendidikan, Investasi SDM dan Pembangunan*, Jakarta, Balai Pustaka.



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