International Journal of Education, Business and Economics Research (IJEBER)

ISSN: 2583-3006

Vol. 3, Issue.5, Sep – Oct 2023, pp. 40-62

To cite this article: Marzuni, Tri Kuat, Budi Santosa and Fitri Nur Mahmudah (2023). The Relevance of Competency Standards in the TKRO Curriculum to Student Competency Material During the Implementation of PKL at the Official Workshop. International Journal of Education, Business and Economics Research (IJEBER) 3 (5): 40-62

THE RELEVANCE OF COMPETENCY STANDARDS IN THE TKRO CURRICULUM TO STUDENT COMPETENCY MATERIAL DURING THE IMPLEMENTATION OF PKL AT THE OFFICIAL WORKSHOP

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https://doi.org/10.59822/IJEBER.2023.3503

ABSTRACT

The objectives of this study are: 1). Analyze the learning process of PKL students in the official workshop of Magelang district. 2). Analyze how much the level of relevance of productive subject competency standards during PKL students in the official workshop of Magelang district to the competence of TKRO productive subjects. 3). Analyze what competency standards are obtained during PKL students at official workshops in Magelang Regency. Relevance in this study is interpreted as conformity between the competency standards of productive subjects obtained by PKL students in official workshops of Magelang Regency with the competence of productive subjects of the TKRO curriculum.

The population in this study was PKL students in the official workshop of Magelang Regency. The workshops as research sites are Daihatsu's official workshops and Mitsubishi's official workshops. The subjects of the study were PKL students of the TKRO Expertise Program who carried out PKL in the official workshop of Magelang Regency. Data were collected by interviews, observations and questionnaires (checklists).

The results showed that the learning process of PKL students in the workshop is to follow the work of mechanics (helpers), do direct work with mechanical supervision, communicate and socialize with workshop residents, and behave tenaciously and diligently. The relevance of TKRO productive subject competency standards to student competency standards during PKL in official workshops in Magelang Regency is 92.8% and competency materials that are not done by PKL students in official workshops are 7.88%. The competencies obtained by students during PKL in official

workshops are in the form of hard skills and soft skills, hard skills competencies in the form of competencies as stated in the TKRO curriculum, namely in the form of Technical Drawing competencies, Basic Automotive Technology, Basic Automotive Works, Light Vehicle Engine Maintenance, Chassis Maintenance and Power Shifters, Light Vehicle Electrical Maintenance, Entrepreneurial Creative Products. Meanwhile, the soft skills obtained by PKL students are tenacious, diligent at work, responsible, disciplined and honest.

KEYWORDS: Relevance, curriculum, fieldwork practice, authorized workshop.

1. INTRODUCTION

One of the problems of vocational education now is how to improve the quality of graduates by improving the relationship between the world of education and the industrial world. Education that is suitable to face the challenges of globalization is education that is oriented to the industrial world with a learning approach and supported by an appropriate curriculum. SMK is an educational institution that aims to prepare Human Resources (HR) that can be absorbed by the world of work, because applicable theoretical and practical materials have been given since first entering SMK, with the hope that graduates have competencies in accordance with the needs of the world of work.
Vocational High School is one form of education system designed to help students develop professional attitudes and be able to compete in mastering certain areas of expertise to prepare themselves for the real world of work. In Government Regulation Number 17 of 2010 concerning the Management and Implementation of Education, states that:

> "Vocational High School, hereinafter abbreviated as SMK, is one form of formal education unit that provides vocational education at the secondary education level as a continuation of SMP, MTs, or other equivalent or advanced forms of learning outcomes that are recognized as equal or equivalent to SMP or MTs" (Government Regulation No17, 2010)

The large number of students who cannot immediately work or are unemployed may be caused by the lack of competence of vocational students with industrial needs. Another reason is that the curriculum created in the previous year is used continuously without consolidation and synchronization with Industry and the World of Work (IDUKA), and without experiencing curriculum changes that are adjusted to industrial progress. Synchronization of the curriculum between schools and industry is absolutely necessary, with time periodically or according to the development and regulation of work needs in industry.

One of the efforts in terms of SMK development is through the development of expertise programs that are relevant to industry needs. This skill competency is the spearhead of creating links and matches between vocational schools and the world of work. Management demands on vocational

education must be in accordance with the link and match policy, namely a change from the old pattern that tends to be in the form of traditional education to something brighter, clearer and concrete to vocational education as a human resource development program.

The reality that has happened to SMK until now is that there is a gap between the world of education and the world of work. The first gap is in the form of the ability of graduates who are not in accordance with the qualification standards of the world of work. Most vocational education graduates are less able to adjust to changes / developments in science and technology that are not easily retrained for their shortcomings. The same thing was also stated in the results of a study conducted by the Directorate of Vocational Development that there is still a competency gap between what is provided in vocational schools and the real needs of the industry. The compatibility between the competencies provided in vocational schools and those required by the industrial world is around 60% to 80%, with the largest gap in large industries and the smallest gap in entrepreneurial activities

The second gap is the number of graduates who do not match the growth of the world of work. The high number of labor force produced by SMK who have not found a job and / or the incompatibility of the field of work with the qualifications they have shows a gap between the quality and professionalism of graduates with qualification standards for the needs of the job market and users. SMK must be able to meet the demands of quality and relevance so that its graduates have a competitive advantage and are ready to face global competition. To meet these expectations, the SMK learning process carried out in schools and in industry is a government policy, namely link and match, in its implementation it is known as Field Work Practice (PKL). (Azmil, 2014)

PKL is a form of education that involves students directly to work in the world of work / industry so that students have competencies that are in accordance with the expectations and demands of the world of work / industry, as well as so that students gain work experience as an effort to improve professional skills. The purpose of street vendors according to the Ministry of Education and Culture (Permendikbud, 2014) is (1). Actualize the Dual System Education (PSG) implementation model between SMK and Instutisi Mitra which systematically and systemically combines educational programs in SMK and skill mastery training programs in the world of work and industry. (2). Divide learning topics from Basic Competencies that can be implemented in SMK and those that can be implemented in Partner Institutions (DU / DI) according to the resources available in each party. (3). Provide hands-on work experience (Real) to students in order to instill (internalize) a positive work climate oriented towards caring about the quality of work processes and results (4). Provide a high work ethic for students to enter the workforce in the face of the demands of the global job market.

The design of the Industrial Work Practice (Prakerin) program is inseparable from the implementation of the syllabus into learning, which requires methods, strategies and implementation evaluation. The design of PKL as part of learning needs to pay attention to the readiness of the world of partner work in carrying out competency learning. This is necessary so that in its implementation, the placement of students for PKL is right on target in accordance with the competencies learned.

In the implementation of street vendors, schools and the industrial world are related to each other and are an integral series that is inseparable in order to achieve the competence of graduates needed by the industrial world. According to Wayong states that:

"Partnerships between educational institutions and the business / industrial world are the main key to the success of Industrial Work Practices in Vocational Schools, where the implementation of education is designed, implemented and evaluated together, so that the relevance of graduate competencies to the demands of the job market increases. "Wayong (2012)

Industry involvement in all educational activities, such as curriculum preparation, implementation of learning in schools, competency tests to marketing alumni to the world of work. The steps that need to be taken by schools in the implementation of street vendors according to (Dit PSMK (2006)) are: (1). Analysis of the achievement of learning outcomes competencies. (2). Mapping the world of work (3). Develop the Prakerin program. 4. Implementation. 5. Program evaluation and follow-up.

One of the efforts to improve the quality of graduates in the world of work is through curriculum renewal. The curriculum is seen as one of the important factors that will determine the ability of graduates with learning experience at school and at IDUKA.

The success rate of the curriculum will be tested in its implementation; a well-structured curriculum will determine the success of its implementation, including the implementation of a curriculum that involves the learning process in the industry through the PKL program. The suitability of productive competency learning materials set out in the curriculum must be implemented in accordance with the demands of curriculum competencies. The implementation of the learning process at IDUKA through the PKL program will also determine the effectiveness of the achievement of curriculum implementation when the competencies implemented in the learning process at IDUKA are in accordance with the demands of the competencies set out in the curriculum.

2. RESEARCH METHODS

3.1 RESEARCH DESIGN

This research is a qualitative descriptive research that is exploratory without hypotheses with a survey approach. Stated by (Arikunto, 2002) that in descriptive research is not intended to test a particular hypothesis but simply describe what it is about a vareabel, symptom, or circumstance.

Descriptive research is research intended to collect information about the research subject and the behavior of the research subject in a certain period. According to (Muhtar, 2013) Descriptive qualitative research seeks to describe all existing symptoms or conditions, namely the state of symptoms according to what they are when the research is conducted.

The focus of this research is to reveal how students' learning process takes place in the workplace in fieldwork practice programs, and how much relevance of productive subject competency standards implemented by students in fieldwork practices in official workshops to the demands of productive

subject competencies in the TKRO curriculum, as well as what competencies students obtain during PKL in official workshops. The series of research questions above require a research approach that is able to reveal the reality behind the sensed (visible) phenomenon, namely with a post-positivism approach. The post-positivism approach is naturalistic because the research is carried out in natural conditions.

3.2 Data Collection Techniques

Stating in qualitative research data can be collected from participants by developing forms called protocols for recording data; forms contain several common questions in such a way that participants can provide answers to those questions. The form includes an interview, observation protocol, whereby the researcher records notes about the participants' behavior. Researchers can also collect text data of words or images, record, observe participants in work.

1. Data sources

a) To find out the learning process in the student's workplace fieldwork practice is obtained by interviewing, and observation of, workshop heads, mechanics, and students.
b) To find out data on vocational competencies obtained/practiced by students in the Official workshop, the data source is from interviews with workshop heads/mechanics, and PKL participating students. To find out the competence of productive subjects in the TKRO curriculum content with a study of the content of the TKRO curriculum.

2. Data Collection Techniques

In this study, data collection used interviews, observations and productive maple competency checklist sheets for Automotive Light Vehicle Engineering. Respondents were given a number of questions or statements related to work and the learning process carried out during Field Work Practice. Interviews and observations are intended to determine the learning process of PKL students and the types of cars serviced in the workshop, while the checklist is to find out the competence of productive subjects obtained / implemented by students during PKL.

3.3 Data Analysis

Data analysis techniques are intended to find evidence of research questions or problems that have been formulated. Data analysis in this study used qualitative descriptive analysis with percentage. The questionnaire data is distinguished by a score of 1 and a score of 0. The data is then analyzed descriptively by arranging, summing, comparing, analyzed with detailed descriptions and tables. Furthermore, the level of relevance to the percentage is interpreted. By comparing competency standard data obtained from industry with the content of competencies in productive subjects of the TKRO curriculum, the relevance category can be determined.

The data analysis techniques used are: (Milles & Huberman, 1984) Miles and Huberman method with inductive stages, namely analyzing data through data reduction procedures, data display, conclusion, and verification.

Data reduction is carried out to select aspects of information relevant to the research focus. This is done because data is usually contaminated with unnecessary data. In this study, data reduction took

place continuously during the research process, namely carrying out the selection of data obtained from interviews and observations to the industry during PKL students and interviews after students completed PKL.

3. Results and Discussion

1. Learning Process of PKL students at IDUKA

The learning process of street vendor students at IDUKA illustrates that street vendor students learn by helping mechanics. When assisting a mechanic, then students observe, doing the work as the mechanic does. Students study independently until they have the skills to work. As stated by respondents Daihatsu Mechanic 1:

> "Children learn by helping mechanics. There are a lot of mechanics here, so they follow the designated mechanics and help other mechanics who need help. The street vendor children observe the mechanics at work, get tools, and wait while watching them work. After a long time, they will be able to do it properly. Sometimes, mechanics tell children how to work. Later, when you are used to it, children don't need to be directed, they can do mechanical work. So street vendors must learn independently to have skills in doing work." (MD1 interview)

In line with what was conveyed by mechanics, PKL students in separate interviews stated that students learn by helping mechanics, picking up tools, observing when mechanics work, and helping mechanics work. By helping mechanics, PKL students learn directly. Mechanics also direct students in work, and give students the opportunity to ask questions that students do not yet know. This was conveyed by respondents of Daihatsu 1 PKL Student students as follows:

> "We learn by helping mechanics. We were asked to help while the mechanic worked, fetching tools. Well, when we helped, we were told how to do various jobs. So we can observe and ask questions directly to the mechanic". (SD1 interview)

In the case of practices, the workshop does not provide special and structured training to students. According to the results of interviews with mechanics, it can be seen that students learn independently and actively by observing, imitating, and asking questions that they do not know. The workshop does not hold special training, but students immediately work with mechanical assistance during working hours. As the results of the interview with Daihatsu Mechanic 1:

> "We don't give special training to street vendor children, so those who actively learn, observe, imitate, ask if they don't know or don't understand that. Yes, the children see firsthand how the mechanics work on their respective tuss. We don't hold special training for children, but the training works right away. There is no specific schedule of materials, but children work during working hours. So students have to manage their schedules and be creative in working". (MD1 interview)

On the other hand, PKL students also stated that they did not receive special training in a certain order, but students actively learned by observing, participating in work, and actively asking the mechanics they followed and helped. If they don't ask, they are considered to have understood and

have no difficulty. By helping one mechanic or another students can learn many things directly, students learn by doing. As Daihatsu 1 PKL student respondents said:

> "My friends and I are not specially trained or in any particular order. But we ourselves must be active and initiative to help, observe, learn and ask questions that do not know or do not know. We are used to helping mechanics work while learning". (SD interview 1)

Although students have learned independently, students are not immediately given the trust to do mechanical work. Students will be given the trust to do work in the workshop if they are skilled. This is to prevent errors from occurring. Students are trusted to do light work, while difficult and heavy work, only part of it is entrusted, others remain the responsibility of the mechanic to do it. Students are given confidence in doing fixed mechanical work under mechanical supervision, as said by mechanic D2:

> "Children are not immediately trusted to do mechanical work. Later, if not, I'm afraid there will be mistakes. Children wait for mechanics to work to do their work, later when they are used to it and can do it, children are asked to help do it. If the street vendor child is skilled, then he can do mechanical work. Sometimes street vendors can do everything, for example for the easy part, but if the difficult thing is only part of it or just helping the mechanic. Of course, it is still awaited and supervised by mechanical supervisors so that mistakes do not occur". (Daihatsu 2 mechanic interview)

In addition to being skilled, the character of responsibility, earnest and serious in working is a benchmark for PKL students to be given confidence in doing mechanical work. Responsibility, and sincerity are the benchmarks for whether someone is worthy of trust or not. Skilled is not enough, but it must be accompanied by the character of responsibility. As Daihatsu 2 student respondents said:

> "Children of street vendors who can be given jobs, yes, children who are responsible for their work, seriously or seriously. In addition to responsibility, yes, his son is skilled in doing work in the workshop".

In addition to being responsible and disciplined, students deserve to be given responsibility if they are able to work skillfully, quickly, and precisely. Work in the workshop not only requires the nature of responsibility, but speed in work, and skills in work are an important part of gaining the trust of customers. This was said by Daihatsu 2 mechanical respondents:

> "PKL children who are given the responsibility are active, prigel, not lazy and trengginas. Not slow. Other than that, yes, who is tenacious but patient? So it's not grusa-grusu". (MD2 interview)

Listening to the statement above, the character of responsibility, and working hard is the main character that a student must have at work. Skilled is not enough, because responsibility is a

fundamental part of whether a person deserves to be trusted to handle an important job. As Daihatsu 2 PKL student respondents said:

> "We are given jobs if we are serious about doing and can be trusted to do the job in the workshop well". (SD 2 interview)

In addition to the character of responsibility and earnest work, the ability to communicate is very important for PKL Students. Sensitivity in helping mechanics is important because this is where students' sensitivity is tested in helping mechanics with each other. Students always help mechanics who need help without always having to be told or asked. This communication skill will encourage students to ask questions or consult taka only to one mechanic, but with many existing mechanics. Through communication, students will learn many things from mechanics, both in knowledge, skills and attitudes. Students will be tested by mechanics, whether he is worthy of the trust to do mechanical work. This is according to the results of interviews with Mitsubishi 1 Mechanic respondents, namely:

> "PKL children don't just help one mechanic, but can help other mechanics. So children keep communicating, asking questions, consulting with existing mechanics. Children can learn many things with many mechanics. Each has its own advantages. If the street vendor child does not ask, it means that there is no problem, it is considered to understand. Later it will be seen what it can do if the child can do the job correctly". (MM1 interview)

Establishing communication is always done by students as an effort to learn, students will ask mechanics about things that are not yet known. As stated by the respondents of PKL Mitsubishi 3 students,

> "We are in constant communication with the residents of the workshop. Sometimes ask if you haven't, or ask if you have difficulty in doing it. We are always accompanied by trainers, taught and supervised at work". (SM2 interview)

The learning process not only has an effect on skills alone, but also has a positive effect on behavior change in students as learners. Habituation and learning consistently will instill behavior as an inherent character in students. Learning directly shapes the character and behavior of students to be more responsible, more sensitive or know what things to do, more disciplined, and has honesty as an important part that someone must have in working anywhere and anytime. This was revealed by the M1 mechanical respondent:

> "PKL children, if they have been interning for a long time, usually have a more responsible nature, know more about work, work more disciplined. We tell street vendors to always be honest and responsible for their work. Grandma is like that, don't we worry about entrusting work to street vendor children". (MM1 interview)

In accordance with what students feel, street vendors make them more responsible, earnest in their work, disciplined, skilled, and have sensitivity to their work. As Mitsubishi 4 PKL student respondents said:

> "As we work, we know how to be responsible, more disciplined, and sensitive to the work we have to do. We strive to work well, responsibly and deftly in accordance with workshop regulations". (SM1 interview)

Based on the results of the research, the learning process of PKL students at IDUKA is by helping mechanics when working. Students will observe and do things that mechanics do. This is the most important part of a learning process, because students must think creatively and independently in building their learning construction. This is because according to the results of research conducted by the author, mechanics generally do not provide special and structured training to develop competencies, as well as skills that must be mastered by students.

Based on the table of research results, the learning process of PKL students at IDUKA is by helping mechanics when working. Students will observe and do things that mechanics do. This is the most important part of a learning process, because students must think creatively and independently in building their learning construction. This is because according to the results of research conducted by the author, mechanics generally do not provide special and structured training to develop competencies, as well as skills that must be mastered by students.

2. The Relevance of TKRO Productive Subject Competency Standards to Competency Standards during PKL Students in Authorized Workshops.

a. Description of Data on the Relevance of TKRO Productive Subject Competency Standards with Productive Subjects during PKL Students in Official Workshops.

Data on the relevance of competency standards for TKRO productive subjects to TKRO productive subjects practiced and not practiced by students during PKL at IDUKA are presented in Table 3.

Table 3. Number and percentage of Competency Standards for TKRO Productive subjects that student practice and do not practice during PKL at IDUKA.

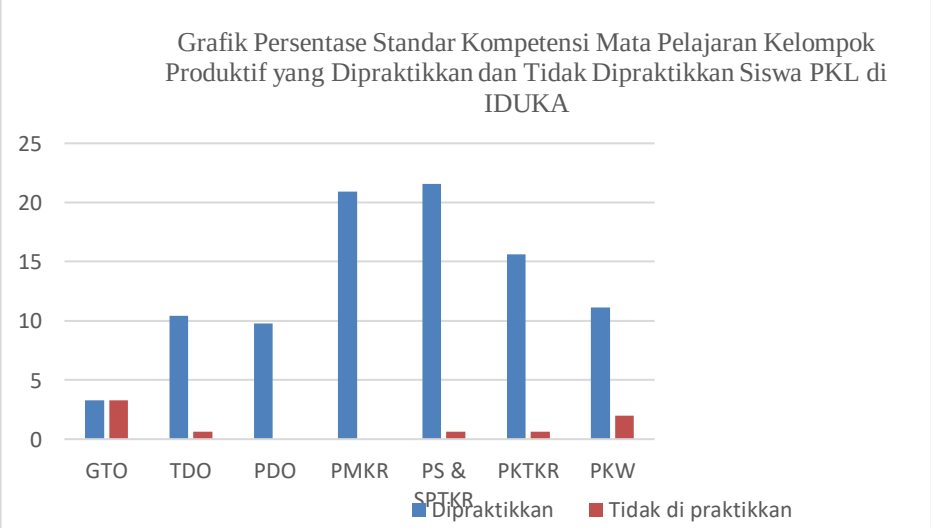
S.N.	Competency Standards for Productive Group Subjects	Practiced		Not Practiced		Qty Total	
		Qty	%	Qty	%	Qty	%
1	Automotive Engineering Drawing	5	3,26	5	3,26	10	6,5
2	Basic Automotive Technology	16	10,45	1	0,65	17	11,11
3	Basic Automotive Jobs	15	9,80	0	0	15	9,8
4	Light Vehicle Engine Maintenance	32	20,9	0	0	32	20,9
5	Chassis Maintenance and Light Vehicle Power Transfer System	33	21,56	1	0,65	34	22,22
6	Light Vehicle Engineering	24	15,6	1	0,65	25	16,33

	Electrical Maintenance						
7	Creative Products and Entrepreneurship.	17	11,11	3	1,96	20	13,07
JML		142	92,8	11	7,18	153	100

Competency data on productive materials practiced and not practiced in IDUKA is the result of combined data at Daihatsu Workshop and Mitsubishi Workshop as official workshop data representatives in Magelang district. The data is grouped into 7 types of TKRO productive subjects, namely (1) Technical Drawing 10 items, (2) Basic Automotive Technology 17 items, (3) Basic Automotive Work 15 items, (4) Light vehicle engine maintenance 32 items, (5) Chassis Maintenance and Power Transfer System 34 items, (6) Electrical Maintenance Engineering Light Automotive Vehicle 25 items. (7) Creative and Entrepreneurial Products 20 items. so that the total number of items there are 153 items of TKRO productive material competence.

To illustrate the percentage of Competency Standards of Productive Group subjects are presented in Graph 1.

Graph 1. Percentage Graph of Competency Standards for Productive Group Subjects Practiced and Not Practiced by PKL Students at IDUKA.



Information

GTO : Automotive Engineering Drawings
TDO : Basic Automotive Technology
PDO : Basic Automotive Jobs
PMKR : Light Vehicle Engine Maintenance
PS &SPTKR : Chassis Maintenance and Light Vehicle Power Transfer System
PKTKR : Light Vehicle Engineering Electrical Maintenance
PKW : Creative Products and Entrepreneurship

Based on data from Table 3 and Graph 1. It can be seen that the number of TKRO competency materials practiced by PKL students in official workshops. The competence of TKRO productive subjects practiced by students in official workshops is 142 items or 92.8% of the total 155 items.

The number consists of the implementation practiced by Technical Drawing 5 points (50%) competence in Technical Drawing, 16 points (94.11%) competence in Basic Automotive Technology, 15 points (100%) Basic Automotive Work, 32 points competence in Vehicle Maintenance and Transportation, 33 points (94.17%) competence in Chassis Maintenance and Power Transfer, 24 points (96%) competence in Electrical Maintenance of Light Vehicle Engineering, 85 points (25%) competence in Entrepreneurial Creative Products.

While the competency items of TKRO productive subjects that are not practiced by PKL students in Authorized Workshops are 5 points (50%) of Automotive Engineering Drawing competence, 1 item (6%) of Automotive Basic Technology competence, 0 (0%) competency of Automotive Basic Work competencies. 0 Point (0%) Light Vehicle Engine Maintenance competence, 1 item (6.25%) Chassis Maintenance and Power Transfer System, 1 item (4%) Light Vehicle Engineering Electrical Maintenance competency, 3 points (15%) Creative Entrepreneurship product competence. So it can be seen that the competence of TKRO Productive subjects practiced by students in the Official Workshop of Magelang district is 92.8%.

b. Description of Data on the Relevance of TKRO Productive Subject Competency Standards with Student Competencies During PKL at Daihatsu Magelang Workshop

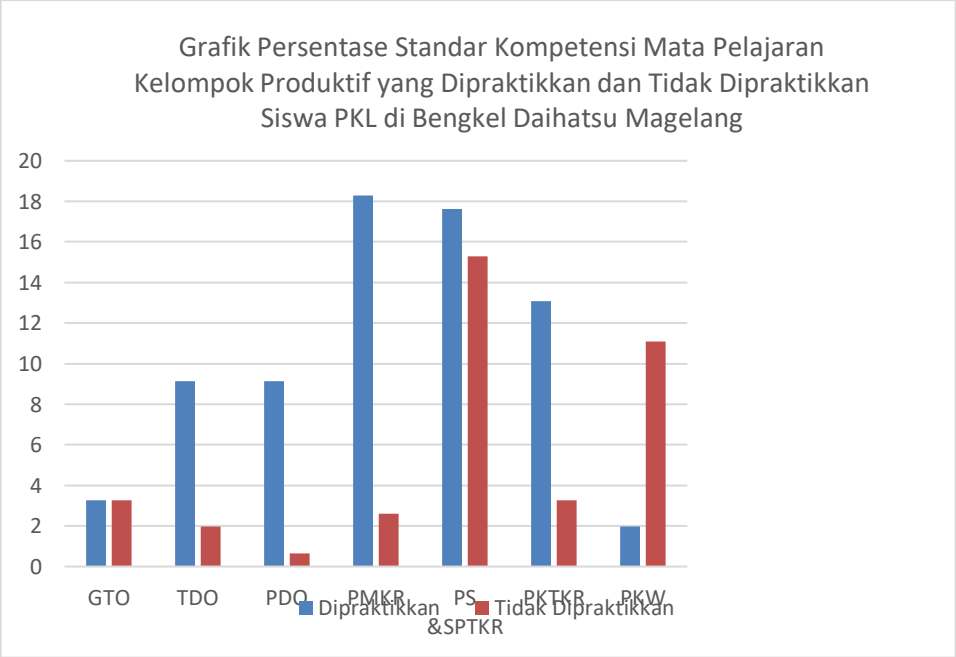
Data on the relevance of TKRO productive subject competency standards to student competencies during PKL at Daihatsu Magelang workshop are presented in Table 4:

Table 4. Number and Percentage of Competency Standards for Productive Subjects. TKRO Practiced and Not Practiced by PKL Students at Daihatsu Magelang Workshop

NO	Competence of Productive Group Subjects	Practiced		Not practiced		Qty Total	
		Qty	%	Qty	%	Qty	%
1	Automotive Engineering Drawing	5	3,26	5	3,26	10	6,5
2	Basic Automotive Technology	14	9,15	3	1,96	17	11,11
3	Basic Automotive Jobs	14	9,15	1	0,65	15	9,8
4	Light Vehicle Engine Maintenance	28	18,30	4	2,61	32	20,9
5	Chassis Maintenance and Light Vehicle Power Transfer System	27	17,64	7	15,30	34	22,22
6	Light Vehicle Engineering Electrical Maintenance	20	13,07	5	3,26	25	16,33
7	Creative Products and Entrepreneurship.	3	1,96	17	11,1	20	13,07
JML		111	72,53	40	26,1	153	100

To illustrate the percentage of Competency Standards of Productive Group subjects, it is presented in Graph 2.

Graph 2. Percentage Graph of Competency Standards for Productive Group Subjects Practiced and Not Practiced by PKL Students at Daihatsu Magelang Workshop.



Information

GTO	: Automotive Engineering Drawings
TDO	: Basic Automotive Technology
PDO	: Basic Automotive Jobs
PMKR	: Light Vehicle Engine Maintenance
PS &SPTKR	: Chassis Maintenance and Light Vehicle Power Transfer System
PKTKR	: Light Vehicle Engineering Electrical Maintenance
PKW	: Creative Products and Entrepreneurship

Based on the data in Table 4. and Graph 2. It can be seen that the number of competency items of TKRO productive subjects practiced by PKL students in the Daihatsu Magelang workshop is 111 items (72.5%). Consists of Automotive Engineering Drawings 5 points (3.26%), Basic Automotive Technology 14 points (9.15%), Basic Automotive Works 14 points (9.15%), Light vehicle engine maintenance 28 points (18.30%), Chassis Engine Maintenance and Light Vehicle Power Transfer 27 points (17.64%), Electrical Maintenance Light Vehicle Engineering 20 points (13.07%), Creative Products Entrepreneurship 3 points (1.96%).

While the competency points of productive learning subjects that are not practiced by PKL students in the Daiihatsu Magelang workshop are 40 items or proportionally reaching 26.1%. The number consists of competencies in the subjects of Automotive Engineering Drawing 5 points (3.26%).,

Basic Automotive Technology 3 (1.96%), Basic automotive work 1 point (0.65%), Light Vehicle Engine Maintenance 4 points (2.61%), Chassis Maintenance and Power Transfer System 7 points (15.30%), Electrical maintenance Light Vehicle Engineering 5 points (3.26 7%), Creative products and Entrepreneurship 317 points (11.1%). So that the productive maple competence that is not practiced by PKL students in Daihatsu workshops proportionally reaches 26.1%.

c. Description of Data on the Relevance of TKRO Productive Material Competency Standards with Student Competencies During PKL at Mitsubishi Magelang Workshop

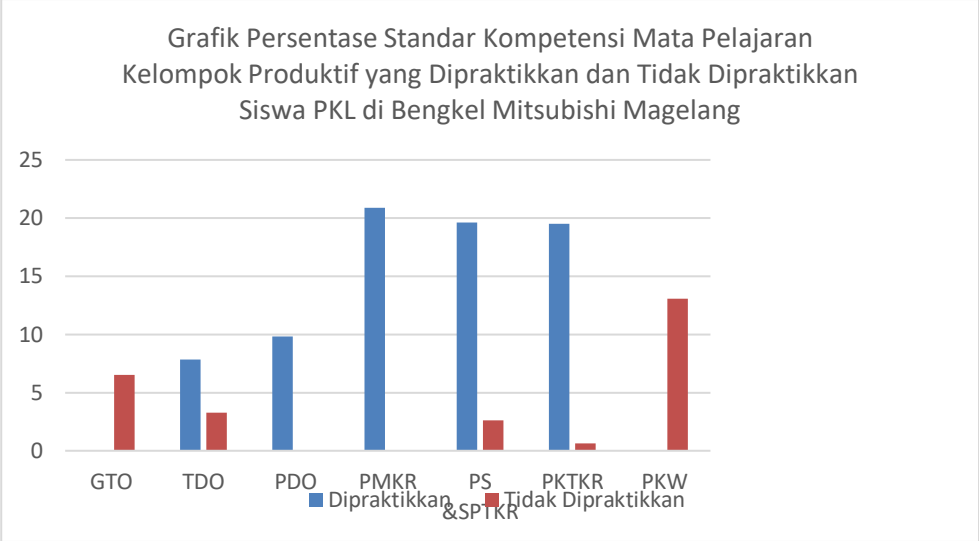
Data on the relevance of TKRO productive subject competency standards to student competencies during PKL at Mitsubishi Magelang workshop are presented in Table 5:

Table 5. Number and Percentage of Competency Items for TKRO Productive subjects practiced and not practiced by PKL students in Mitsubishi Magelang workshop.

NO	Competence of Productive Group Subjects	Practiced		Not practiced		Qty Total	
		Qty	%	Qty	%	Qty	%
1	Automotive Engineering Drawing	0	0	10	6,53	10	6,5
2	Basic Automotive Technology	12	7,84	5	3,26	17	11,11
3	Basic Automotive Jobs	15	9,80	0	0	15	9,8
4	Light Vehicle Engine Maintenance	32	20,91	0	0	32	20,9
5	Chassis Maintenance and Light Vehicle Power Transfer System	30	19,60	4	2,61	34	22,22
6	Light Vehicle Engineering Electrical Maintenance	24	19,51	1	0,65	25	16,33
7	Creative Products and Entrepreneurship.	0	0	20	13,07	20	13,07
JML		113	73,85	40	26,12	153	100

To illustrate the percentage of Competency Standards of Productive Group subjects, it is presented in graph 3.

Graph 3. Percentage Graph of Competency Standards for Productive Group Subjects Practiced and Not Practiced by PKL Students at Mitsubishi Magelang Workshop.



Information

GTO	: Automotive Engineering Drawings
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PMKR	: Light Vehicle Engine Maintenance
PS &SPTKR	: Chassis Maintenance and Light Vehicle Power Transfer System
PKTKR	: Light Vehicle Engineering Electrical Maintenance
PKW	: Creative Products and Entrepreneurship

Based on Table 5. and Graph 3. It can be seen that the number of competency items of TKRO productive subjects practiced by PKL students in the Mitsubishi Magelang workshop. 113 grains (73.85 %) . Consists of Automotive Engineering Drawings 0 points (0%), Basic Automotive Technology 12 points (7.84%), Basic Automotive Work 15 points (9.50%), Light vehicle engine maintenance 32 points (20.91%), Chassis Engine Maintenance and Light Vehicle Power Transfer 30 points (19.60%), Electrical Maintenance Light Vehicle Engineering 24 points (19.51%), Creative Products Entrepreneurship 0 points (0%).

Meanwhile, there are 40 points of competency for productive teaching subjects that are not practiced by PKL students in the Mitsubishi Magelang workshop or proportionally reach 26.1%. The number consists of competencies in the subjects of Automotive Engineering Drawing 10 points (6.53%)., Basic Automotive Technology 5 points (3.26%), Automotive Basic Work 0 points (0 %), Light Vehicle Engine Maintenance 0 points (0 %), Chassis Maintenance and Power Transfer System 4 points (2.61 %), Electrical Maintenance of Light Vehicle Engineering 1 point (0.65 %), Creative Products and Entrepreneurship 0 points (0 %). So that the competence of productive subjects that are not practiced by PKL students in Mitsubishi workshops there are 40 items proportionally reaching 26.1%.

3. Competencies obtained by PKL students at IDUKA

The competencies obtained by students while participating in PKL at the OFFICIAL Workshop are grouped into soft skills competencies and hard skill competencies. Both become an inseparable part of the effort to achieve the success of a job. From the results of observations and journal studies of PKL student reports, soft skills competencies of PKL students are generally as follows: (1). Tenacious attitude in working and improving self-skills. (2). Honest attitude in behavior during street vendor activities. (3). Responsible attitude in carrying out and helping to complete mechanical work. (4). Fairness. (5). Attitude to build cooperation between friends and mechanics in carrying out tasks when pkl. (6). Attitude of adapting to the workshop environment. (7). Cooperation between the mechanical team and fellow PKL students both from one school and from another school. (8). Attitude to build communication between workshop residents to develop curiosity by asking questions and implementing the principle of greeting and greeting. (7). Tolerant attitude. (8). Respect for others. (9). Courageous attitude to make decisions. (10). Attitude of effort with his ability to contribute to solving problems both technical and psychic.

Hard skill competencies obtained by PKL students are generally the abilities that students have worked on related to the competency items listed in the competency items of productive subjects of the TKRO curriculum that students have worked on / practiced while participating in Prakerin / PKL. Competency items practiced by PKL students in the official workshop of Magelang Regency can be grouped into:

1. Light Vehicle Engineering Drawing Competence consists of 5 competencies, including: (1) Choosing equipment and completeness of technical drawings, (2) Distinguishing technical drawing lines according to the shape and function of lines, (3) Presenting sketches of 3D object drawings according to pictorial projection rules, (4) Presenting types of cut drawings based on the type of cut, (5) Presenting sizes according to the function and main view of technical drawings.
2. Basic Automotive Engineering Competencies, consisting of 17 competencies, including: (1) Identifying the potential and risk of work accidents, (2) Implementing the use of Light Fire Extinguishers (APAR) and Personal Protection Equipment (PPE) in Industrial Environments, (3) Applying the principles of contamination control, (4) Demonstrating energy conversion engines, (5) Identifying engine, Chassis and Power Train models, (6) Explaining how 2 and 4-stroke engines work, (7) Using OMM (operation maintenance manual), service manual and part book according to their designation, (8) Implementing Work Habit, Basic Mentality and 5S in Industrial Environments, (9) Explaining the basics and symbols of the hydraulic system, (10) Explaining the basics and symbols of the pneumatic system, (11) Making simple electrical circuits, (12) Making simple electronic circuits, (13) Making simple control circuits, (14) Testing sensors, (15) Caring for the battery, (16) Implementing KikenYochi Training (KYT) and Job Instruction
3. Basic Automotive Work Competencies, consisting of 15 competencies including: (1) Using various hand tools, (2) Using various power tools, (3) Using various special service tools, (4) Using workshop equipment, (5) Using mechanical measuring instruments, (6) Using electrical measuring instruments, (7) Using electronic measuring instruments, (8) Using hydraulic measuring instruments , (9) Using pneumatic measuring instruments, (10) Maintaining jacking equipment, blocking and liffting according to the operation manual, (11) Demonstrating the lifting of workpieces, (12) Caring for various bearings, seals, gaskets and

hoses, (13) Using treaded, fastener, sealant and adhesive, (14) Conducting Basic Service Training (BST) and Dojo

4. Automotive Light Vehicle Engine Maintenance Competence, consisting of 33 competencies, including: (1) Periodic maintenance of the main engine system and valve mechanism (conventional engine and EfiVVTi), (2) Periodic maintenance of the lubrication system (conventional engine and EfiVVTi), (3) Periodic maintenance of the cooling system (conventional engine and EfiVVTi), (4) Periodic maintenance of conventional gasoline fuel system / carburetor, (5) Periodic maintenance of gasoline fuel system injection (Electronic Fuel Injection / EFI), (6) Implementing Quality Control System Circle (QCC) in the School Environment, Carrying out periodic maintenance up to CH 20,000 KM, (7) Periodic maintenance of Engine Management System (EMS), (8) Using EFI scanners, (9) Periodic maintenance of In-Line injection pump diesel fuel system, (10) (11) Periodic maintenance of diesel fuel system Rotary injection pump, (12) Periodic maintenance of the Common Rail diesel fuel system, (13) Checking the results of periodic maintenance of Light Vehicle Engines, (14) Implementing One Sheet Report, (15) Performing Periodic Maintenance up to 40,0000 KM, (16) Improving the cylinder head mechanism and its fittings (Conventional Engines and Efi VVT-i), (17) Repairing the cylinder block mechanism and fittings (Conventional Engines and Efi VVT-i), (18) Improving the lubrication system (Conventional Engines) and Efi VVT-i), (19) Improving the cooling system (Conventional Engine and Efi VVT-i), (20) Repairing the conventional gasoline/carburetor fuel system, (21) Repairing the Electronic Fuel Injection (EFI) fuel injection system, (22) Maintaining the Turbo Charger, Applying DU/DI information, (23) Applying the Written Psicotest Completion Technique, (24) Applying the interview technique, (25) Applying Basic Diagnostic Engine I, (26) (27) Improving Engine Management System (EMS), (28) Repairing In-Line injection pump diesel fuel system, (29) Repairing Rotary injection pump diesel fuel system, (30) Maintaining EFI Diesel System, (31) Repairing Common Rail diesel fuel system, (32) Conducting light vehicle engine repair results report.
5. Competence Chassis Maintenance and Power Transfer There are 33 points of competence, including: (1) Periodic maintenance of clutch, (2) Periodic maintenance of manual transmission, (3) Periodic maintenance of automatic transmission, (4) Periodic maintenance of propeller shafts, (5) Periodic maintenance of Differential, (6) Periodic maintenance of wheel shafts, (7) Periodic maintenance of conventional brake systems, (8) Applying Horenso, (9) Periodic maintenance of suspension systems, (10) Periodic maintenance of steering systems and Power Steering, (11) Remove, Install and Adjust the Wheels, (12) Carry out Disassembly, Repair and Install Outer and Inner Tires, (13) Carry Out Selecting Tires and Rims for Special Applications, (14) Perform final testing of the results of periodic maintenance of the chassis and power shifter, (15) Implement Kaizen, (16) Fix the clutch, (17) Fix the Manual transmission, (18) Fix the Automatic transmission, (19) Fix the propeller shaft, (20) Fix the Differential, (21) Repairing the axle, (22) Repairing the Conventional brake system, (23) Repairing the Antilock Break System (ABS), (24) Maintaining the Four Wheel Drive (FWD) and SRS Airbag System, (25) Implementing Basic Diagnostic Chassis and Power Shifter, (26) Improving the suspension system, (27) Improving the steering system, (28) Improving the alignment, (29) Repairing the Wheels/Tyres, (30) Conducting final testing of chassis repair results and power shifters, (31) Maintaining TRC and VSC, (32) Maintaining Exhaust and Pneumatic Brake, (33) Applying Basic Diagnostic Chassis and Power Transfer II.
6. Electrical Maintenance Competence Light vehicles there are 24 points of competence including: (1) Periodically maintain the electrical system, (2) Install Additional Electrical Equipment (Accessories), (3) Periodically maintain the starter system (Conventional and Electronic), (4) Periodically maintain the charging system (Conventional and Electronic), (5) Periodically maintain the conventional ignition system, (6) Periodically maintain the electronic ignition system, (7) Apply Presentation Skill, (8) Periodic maintenance of lighting systems and

instrument panels, (9) Periodic maintenance of Air Conditioning (AC) systems, (10) Periodic maintenance of audio systems, (11) Periodic maintenance of safety systems, (12) Periodic maintenance results of light vehicle electricity, (13) Repairing electrical systems and additional fittings, (14) Repairing the starter system, (15) Repairing the charging system, (16) Repairing conventional ignition systems, (17) Repairing the electronic ignition system, (18) Maintaining the Automatic Air Conditioning System, (19) Maintaining the Immobilizer System and Smart Key, (20) Repairing the lighting system and instrument panel, (21) Repairing the Air Conditioning (AC) system, (22) Repairing the audio system, (23) Repairing the safety system, (24) Managing the results of light vehicle electrical repairs.

7. Competence in Making Creative Entrepreneurial Products, there are 3 competencies including: (1) Presenting attitudes and behaviors, (2) Testing goods/services products, (3) Conducting product inspections in accordance with product eligibility criteria/operational standards.

B. DISCUSSION

1. Learning Process of PKL students at IDUKA

Based on the results of interviews and research shows that the learning process of PKL students at IDUKA is by helping mechanics when working. Students will observe and do things that mechanics do. This is the most important part of a learning process, because students must think creatively and independently in building their learning construction. This is because according to the results of research conducted by the author, mechanics generally do not provide special and structured training to develop competencies, as well as skills that must be mastered by students.

Refer to previous research (Miswardi & Pardjono, 2013) states that Prakerin participants learn by helping mechanics in working. And there is no structured training order by mechanics on competencies that must be mastered by students; indirectly students must find their own competencies that must be learned through work by doing certain ways to gain mechanical confidence. The trust that may be given by mechanics to do part or all of the work to students is a good achievement of prakerin implementation by students.

From the explanation above, the creativity and independence of student learning is the most important thing so that students are able to learn to do things that mechanics do, to achieve good competence.

According to Syahputra (2017), learning independence is a learning activity carried out by students without relying on the help of others, both friends and teachers in achieving learning goals, namely mastering material or knowledge well with their own awareness and students can apply their knowledge in solving problems in everyday life.

While (Elizabeth Hurlock, 2000) Explaining that learning independence is the behavior of students in realizing their will or desire in a real way well by not depending on others, in this case the student is able to do learning alone, can determine how to learn effectively, is able to carry out learning tasks well and is able to carry out learning activities independently.

From the understanding of learning independence above, learning independence is a very important aspect in the world of education where students who do not have learning independence will be very difficult to be responsible for everything, especially in the learning process, besides that

students cannot make their own decisions and do not have ideas, ideas, and initiatives in every problem faced it is caused by dependence on others and always rely on others.

Learning independence can be described into seven things, namely: (1). Students strive to increase responsibility in making various decisions. (2). Self-reliance is seen as a trait that already exists in every person and learning situation. (3). Self-reliance does not mean separating oneself from others. (4). Independent learning can transfer learning outcomes in the form of knowledge and skills in various situations. (5). Students who study independently can involve a variety of resources and activities such as self-reading, group study, exercises and correspondence activities. (6). The effective role of teachers in self-learning is still possible such as dialogue with students, finding sources, evaluating results and developing critical thinking. (7). some educational institutions find ways to develop self-learning through open learning programs, Susilawati (2009)

According to Hasan Basri (2004), student learning independence is influenced by several factors, namely factors contained within themselves (endogenous factors) and factors that exist outside themselves (exogenous factors): a. Endogenous (internal) factors Endogenous (internal) factors are all influences that originate from within themselves, such as the state of heredity and the constitution of his body from birth with all the equipment attached to him. Exogenous factors (external) are all conditions or influences that come from outside themselves, often also called environmental factors. The living environment that individuals face greatly affects the development of a person's personality, both in negative and positive ways. A good family and community environment, especially in the field of values and life habits, will shape personality, including in terms of independence.

From the explanation above, learning independence can encourage the formation of good competencies in students. The relationship between competence and learning independence in this study is that when students have good competence, they will certainly get the trust of mechanics. A form of trust given by mechanics to students, namely mechanics will provide part of their work or all to be done by students while remaining under the supervision and guidance of mechanical supervisors. When the mechanic gave his job, it was an achievement achieved by street vendor students. With this achievement, students become confident and confident in the learning ability they achieve.

The results showed that there were various efforts made by students in achieving these achievements. The efforts made by students include.

First, establish good communication and social relations with all mechanics in the workshop. When PKL, students follow a mechanic who is trusted by the company to guide students because they already have experience as trainers to conduct training for novice workers. Despite this, students are not placed on a specific job and are given all the competencies like a novice worker. In the intermediate workshop, students do not follow one mechanic alone, but students are asked for help when a mechanic is in need. This is where the social sensitivity and initiative of students are needed to independently be able to communicate and establish good social relationships with mechanics. With good communication and social relations, trust will be built, students will learn to do

mechanical work and have good competence according to the training that has been taught by mechanics. If the student's competence is good, the mechanic will entrust part or even all of his work to the PKL student with the lowest level of difficulty and risk to the work with the highest level of difficulty and risk. Sensitivity is also needed when the trainer mechanic is not working, so students help and follow other mechanics who are working. This is where communication skills and establishing good social relationships are needed so that students can always study and work when PKL.

Second, tenacious and diligent nature in working. Tenacious nature is a strong will and never gives up on students at work. This trait is very necessary, so that students are able to work well and have the necessary competencies in the real world of work. Field Work Practice is a picture of students' work in the future after graduation, so that students have good resilience in working. This tenacious and diligent nature will be a separate assessment by mechanics when PKL students. Students who are tenacious and diligent will certainly gain full trust from mechanical trainers because students are able to do their work successfully and repeatedly with sufficient competence.

Third, students work actively. Students who are working in street vendors work actively, that is, always actively working during working hours. This is because street vendors are a true picture of work after they are in the world of work. Active work is not only an effort to gain the trust of mechanics, but also to test endurance, sincerity and good work ability. If students do not work actively, it will give the impression of being lazy, incompetent and unreliable.

Fourth, students have initiative, namely students have concern and the ability to think, act and behave appropriately in accordance with the needs of the world of work. Students have the initiative to work appropriately in assisting mechanics. In addition, students also have the initiative to learn and ask questions that they don't know yet. This is because there is a lot of knowledge and competence that students do not have, so students tend to actively do work and ask mechanical trainers and assistant trainers.

Fifth, Work quickly and precisely. Students will try to always work quickly to the rhythm of the mechanics. That's because in an official automotive workshop, there is a target for someone to complete their work, so working quickly becomes an unavoidable demand. Although it is required to work quickly, it must also be precise, in the sense of doing all work correctly according to the standards that must be met.

All six students are disciplined and responsible. Discipline and responsibility are students' efforts to gain trust. The form of discipline includes starting and ending work in accordance with the specified time, fulfilling operational procedures that must be obeyed and discipline in fulfilling work safety. Work safety concerns the safety of personal beings, tools and other safety. Responsibility is an important part of work, realized by carrying out work that is the duty and responsibility of students.

From the results of the research above, it can be seen that education in addition to developing science and skills, also aims to shape personality, independence, social, and character. Education

functions to develop the ability and shape the character and civilization of a dignified nation in order to educate the nation's life, develop the potential of students to become human beings who believe and fear God Almighty, have noble character, healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens, Act (2003). Referring to these regulations, every learning process is expected to be able to develop students' potential in knowledge, attitudes, and skills. From this formulation, it can be interpreted that education is an effort to form intelligent and noble characters.

Education is closely related to moral values, because broadly, education can be interpreted as a moral effort on how students should behave. Education is the inculcation of moral values and the improvement of behavior both individually and socially for students. Thomas (2008) states that character education is an effort to develop virtue as the foundation of a useful, meaningful life, and the foundation for a just, loving, and advanced society.

Related to character education above Hasan and Wahab (2010), states that responsibility is the attitude and behavior of a person to carry out his duties and obligations, which should be done, towards oneself, society, the environment (natural, social and cultural), the country and God Almighty.

2. The Relevance of PKL Student Competencies in IDUKA to TKRO curriculum competencies

The learning materials for Automotive Light Vehicle Engineering practiced by PKL students in the Authorize workshop as a whole are 92.8% of the overall competencies listed in the curriculum structure of productive subjects. Thus, not all competency materials in the TKR curriculum for Productive subjects can be practiced by students while implementing PKL at IDUKA. It is proven that there are several competencies in TKRO that are not or have not been implemented during PKL students, which is 7.18%. From the data and observations of competency material obtained or implemented by PKL students in each IDUKA there are differences. Due to the type and specificity of car products carried out related to car specifications produced by certain brands of car industry, in this case the competencies carried out by PKL students in Daihatsu workshops are different from Mitsubishi workshops. In the Daihatsu workshop where the competence carried out by students dominates working on gasoline-fueled cars with injection technology, while for the Mitsubishi workshop is dominated by diesel engine vehicles. In Daihatsu workshops, the level of material relevance of TKRO productive maple competency is 72.5%, while the competence of productive subjects that students do not carry out during PKL at Daihatsu workshops is 26.1%. For Mitsubishi workshops, the level of relevance of TKRO productive subject competency material is 73.85%, while productive subjects that are not implemented during PKL students in Mitsubishi workshops are 26.1%.

3. Competencies obtained by PKL students at IDUKA

Hard skills are a technical ability, such as academic ability and science related to the profession. Hard skills describe behaviors and skills that can be seen by the eye (explicitly) Arifin (2012). Different professions will have hard skills different, but any profession requires soft skills the same.

Based on the results of the study, it shows that mastery of competencies (hard skills) in the form of knowledge and skills obtained during Prakerind/PKL students is all the work done by PKL students while at work. From the data, it is obtained that most of the work carried out in the workplace is in accordance with the competencies in schools contained in the TKRO curriculum, namely Automotive Engineering Drawings, Automotive Basic Technology, Automotive Basic Works, Automotive Basic Works, Light Vehicle Engine Maintenance, Chassis Maintenance and Light Vehicle Power Transfer System, Light Vehicle Engineering Electrical Maintenance, Creative Products and Entrepreneurship. This means that there is relevance between productive maple competencies in the TKRO curriculum and competencies carried out by PKL students in official workshops.

Creative and entrepreneurial products are not much done by students at the Authorize workshop street vendor, but experience and knowledge about industrial culture are obtained at the street vendor by means of interaction and socialization, observation of activities in the workshop.

While competence in the form of tenacity, diligent work, responsibility, discipline and honesty is soft skills. Various research results from large companies state that the success of a professional is largely determined by mastery soft skills than hard skills (Muqowim, 2012). Soft skills closely related to intrapersonal skills (Intrapersonal skills) and interpersonal skills (Interpersonal skills).

Intrapersonal skills emphasize how a person can manage one's potential, develop one's potential abilities, and perceive the reality around one. Realization soft skills These include honesty, responsibility, fairness, responsibility, the ability to work together, adaptability, communication, tolerance, respect for others, decision-making ability, and problem-solving skills. Interpersonal skills are concerned with emphasizing how a person manages himself in relationships with those around him. Skills soft skills these include abilities: adapt, work in a team, communicate effectively, motivate others, and deal with differences (Arifin (2012)) In his book wrote that soft skills determines a person's success by about 80%, while hard skills only about 20%. This is based on research on successful people. Successful people have characters including: 1) willing to work hard, 2) high self-confidence, 3) have a vision for the future, 4) can work in a team, 5) able to think analytically, 6) adaptable, 7) able to work under pressure, 8) able to speak English, and 9) able to organize work. Referring to these findings, soft skills Students are very important to be developed to face the world of work, higher education levels, and live in society. Failure of education in developing soft skills will only produce graduates who are good at memorization and have few skills, but are weak in leading. Another consequence is to produce academically intelligent people, but less noble in morals.

Further (Muqowim (2012)) Writing that a leader and a champion have 20 important abilities, including: 1) communication skills, 2) honesty / integrity, 3) cooperation skills, 4) interpersonal skills, 5) ethics, 6) motivation / initiative, 7) adaptability, 8) analytical power, 9) computer skills, 10) organizational skills, 11) goal-oriented, 12) leadership, 13) confidence, 14) friendly, 15) polite, 16) wise, 17) achievement index, 18) creative, 19) humorous, and 20) entrepreneurial ability.

Referring to the various discoveries above, education not only emphasizes the transfer of knowledge, but also the transfer of value. Education must also develop a variety of skills related to the ability to manage themselves and establish relationships with others. Education is expected to be able to produce a generation that is intelligent and skilled in their fields, has noble rights, has creativity, sensitivity, intuition, communicative.

4. CONCLUSION

From the results of the study, several conclusions can be obtained as follows:

1. The learning process of PKL students in the workplace (IDUKA) :(a) learning through work by following mechanics, (b) doing work directly with guidance, supervision from mechanics, (c) communicating and socializing, with workshop residents, (d) PKL students are diligent, tenacious, active and initiative.
2. The relevance of TKRO productive subject competency material to the competence of PKL students in the Authorize workshop in Magelang Regency is 92.8% and the competency material that students do not do during PKL in the Authorize workshop is 7.88%.
3. The competencies obtained by PKL students in the Official workshop are in the form of hard skills and soft skills competencies. Hards kill competencies in the form of competition as stated in the TKRO curriculum, namely in the form of Automotive Engineering Drawing competencies, Basic Automotive Technology, Basic Automotive Works, Automotive Light Vehicle Engine Maintenance, Chassis Maintenance and Power Shifters, Electrical Maintenance of Light Vehicle Techniques, Entrepreneurial Creative Products. Meanwhile, the soft skills obtained by Prakerin / PKL students are tenacious, diligent at work, responsible, disciplined and honest.

REFERENCES

Arifin, M. (2012). Dan Barnawi. *Strategi dan Kebijakan Pembelajaran Pendidikan Karakter*.

Arikunto, S. (2002). *Prosedur penelitian suatu pendekatan Praktik*. Jakarta: Rineka Cipta.

Azmil. (2014). Pengembangan Instrumen penilaian praktik Kerja industri paket keahlian teknik sepeda motor

(studi pada sekolah menengah kejuruan). *Universitas Pendidikan Indonesia*.

basri, H. (2004). Remaja Berkualitas: Problematika Remaja dan Solusinya. Yogyakarta: Pustaka pelajar.

Creswell, J. (2015). *Educational Research, Planing, Conducting, and Evaluating Quantitative and Qualitative.* Yogyakarta: Pearson Education.

DitPSMK. (2006). Penyelenggaraan Sekolah Menengah Kejuruan Bertaraf Internasional.

Elizabeth Hurlock, B. (2000). Perkembangan Anak, Jilid 4, Edisi Keenam. *Jakarta: Erlangga*.

Firmansyah, R. O., & Sumarna, N. (2015). Studi Keterlaksanaan Prakerin Terhadap Kompetensi Keahlian Teknik Kendaraan Ringan Siswa Smk. *Jurnal Pendidikan*.

Hanafi, I. (2014). *Pendidikan Teknik dan Vokasional:: Menggali Pengalaman Sukses Institusi Bi-National di Negeri Jiran, dari Konsep hingga Implementasi*: Deepublish.

Hasan, S. H., & Wahab, A. (2010). Pengembangan pendidikan budaya dan karakter bangsa. *Jakarta: KEMENAS Badan Penelitian dan Pengembangan Pusat Kurikulum*.

Jatmoko, D. (2013). Relevansi Kurikulum SMK Kompetensi Keahlian Teknik kendaraan Ringan terhadap kebutuhan dunia Industri Di Kab Sleman *Jurnal Pendidikan*.

Milles, M., & Huberman, M. (1984). *Qualitative Data Analysis*. london: Saga Publication.

Miswardi, Y., & Pardjono, P. (2013). Proses dan hasil belajar pada Prakerind bidang keahlian kendaraan ringan: studi kasus pada industri pasangan SMKN 3 Yogyakarta. *Jurnal Pendidikan Vokasi*, *3*(2).

Muhtar. (2013). *Metode Praktis Penelitian Deskriptif Kualitatif*. Jakarta GP Press Group.

Muqowim. (2012). *Pengembangan Softskill Guru*: Pedagogia, 211.

Permendikbud. (2014). No 60 Tahun 2014 tentang Kurikulum 2013 *SMA, dan SMK*.

PPno17. (2010). *Peraturan pemerintah nomor 17 tahun 2010 tentang pengelolaan dan penyelenggaraan pendidikan*: Pustaka Timur.

Prosser, C. A. (1912). Vocational education: Legislation of 1910-1911. *The American Political Science Review, 6*(4), 586-595.

Samsul, H. (2015). Relevansi Antara Kompetensi Mata Pelajaran Produktif Dengan Pekerjaan Dalam Pelaksanaan Praktik Kerja Industri siswa Program Keahlian Teknik Kendaraan Ringan Sekolah Menengah Kejuruan Perindustrian Yogyakarta.

Simamora, I. G. (2009). Relevansi Kompetensi Siswa SMK Negeri Program Keahlian Teknik mekanik Otomotif di Kota Medan. *Jurnal Pendidikan*.

Susilawati, D. (2009). Upaya Meningkatkan Kemandirian Belajar dan Kemampuan Matematika Siswa Kelas X SMA N 1 Gamping dengan Menggunakan Lembar Kerja Siswa. *Skripsi. Yogyakarta. UNY (Tidak Dipublikasikan)*.

Sutrisno, H. (1994). *Metodologi Research*. Yogyakarta: Andi Ofset.

Syahputra, D. (2017). Pengaruh kemandirian belajar dan bimbingan belajar terhadap kemampuan memahami jurnal penyesuaian pada siswa SMA Melati Perbaungan. *AT-TAWASSUTH: Jurnal Ekonomi Islam, 2*(2), 368-388.

Thomas, L. (2008). Effective Character Education.

Ulansari, L. U. (2015). Inovasi Sekolah Berbasis Teknologi Informasi Dalam Meningkatkan Mutu Pendidikan Kejuruan (Studi Pada Sekolah Menengah Kejuruan Pgri 3 Malang). *Jurnal Administrasi Publik, 3*(11), 1851-1856.

Undang-Undang. (2003). tahun 2003 tentang sistem Pendidikan Nasional.

Wayong, A. D. C. (2012). Relevansi Pendidikan Sistem Ganda (PSG) pada Sekolah Kejuruan dengan Kebutuhan Dunia Kerja. *Prosiding APTEKINDO, 6*(1).

Wijanarka, B. (2012). Sosok Ideal Lulusan Pendidikan Vokasi Indonesia Generasi 2045. *B. Sentot Wijanarka, Paper Konaspi 7, 2*.