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Link and Match Program to Establish Competence of Fiber Optical Technology: A Case Study at VHS Sore Tulungagung with Telkom Indonesia

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ABSTRAK

Abstract: This study aims to identify and describe the link and match program carried out by schools and industry, especially in the field of fiber optic technology. The research approach used is descriptive qualitative. The technique used in collecting data is through interviews, observation and documentation. The result of this research is a link and match program The activities carried out by SMK SORE Tulungagung with Telkom Indonesia in the field of fiber optic technology are carried out in the form of aligning the curriculum in the industrial class in the field of fiber optic technology, teacher human resource training activities in the field of fiber optic technology, procurement of facilities and infrastructure to support fiber optic installation practices in schools, and implementation of learning activities in schools and in industry.

Abstrak: Penelitian ini bertujuan untuk mengetahui dan mendeskripsikan program link and match yang dilakukan oleh sekolah dengan industri, khususnya di bidang teknologi fiber optik. Pendekatan penelitian yang digunakan adalah deskriptif kualitatif. Teknik yang digunakan dalam mengumpulkan data melalui wawancara, observasi dan dokumentasi. Hasil penelitian ini adalah program link and match yang dilakukan oleh SMK SORE Tulungagung dengan Telkom Indonesia bidang teknologi fiber optik dilakukan dalam bentuk penyelarasan kurikulum di kelas industri bidang teknologi fiber optik, kegiatan pelatihan sumberdaya manusia guru di bidang teknologi fiber optik, pengadaan sarana dan prasarana penunjang praktik instalasi fiber optik di sekolah, serta pelaksanaan kegiatan pembelajaran di sekolah dan di industri.

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INTRODUCTION

The development of the industry in the field of information technology is progressing very rapidly. The application of information technology in various fields of the production process is increasingly widespread following the development of the industrial revolution 4.0. This increases the challenges and demands for the competencies expected of graduates of vocational high schools to the needs of industry, which means that there is no gap between the competencies of vocational high school graduates and the needs of work competencies in industry. One source of skilled manpower and is expected to meet the needs of the industry is a vocational high school (SMK) graduate.

But on the other hand, competition for jobs in today's global era is increasingly competitive and unpredictable. Especially in the workforce at the secondary school graduate level. This is due to the large number of middle-level workers and the increasingly high demands of the industrial world. To be able to compete in this competition, SMK graduates are required to have adequate competence and superior character. This challenge makes SMKs have to adapt and innovate to equip their graduates so that they are ready to face today's workforce competition.

Based on February 2021 Labor Force data released by the Central Bureau of Statistics (BPS) in May 2021, it can be seen that the number of Indonesia's workforce reached 139.81 million people. Of this amount, 6.26 percent or around 87.5 million people are unemployed, so they are included in the Open Unemployment Rate (TPT). TPT is an indicator to determine the level of the labor force that is not absorbed by the labor market and illustrates how the labor supply is not utilized optimally. The TPT of SMK graduates shows the highest percentage compared to graduates of other education levels, which is 11.45 percent. In the previous year, the employment situation in East Java Province was not much different from the national data. Based on the State of Employment in East Java, August 2020 issued by the Central Bureau of Statistics (BPS) No.70/11/35/Thn.XVIII, November 5, 2020, it can be seen that the number of the workforce in August 2020 was 22.26 million people, an increase of 396 .37 thousand people compared to August 2019. In line with that, in the last year, unemployment increased by 466.02 thousand people and the Open Unemployment Rate (TPT) rose by 2.02 percentage points to 5.84 percent in August 2020. In terms of education level, TPT for Vocational High Schools (SMK) still dominates among other education levels, which is 11.89 percent.

Meanwhile, in Tulungagung Regency, the percentage of TPT has increased from year to year. Based on the State of Employment in East Java, August 2020 issued by the Central Bureau of Statistics (BPS), TPT in Tulungagung Regency was 4.61 percent of the workforce in the August 2020 period. This percentage increased by 1.32 percent from the previous year, which was 3.29 percent. in August 2019. Judging from the level of education, the TPT of Tulungagung Regency for Senior High Schools, which includes Vocational Schools, also still dominates among other education levels, which is 9.53 percent.

When viewed from the Open Unemployment Rate (TPT) released by BPS, the unemployment rate for SMK graduates is the highest when compared to other education levels. This shows that there are many SMK workforce that are not absorbed in the labor market, even though SMK graduates should be a group of the workforce who already have skills in certain fields (skill workers) when compared to high school graduates (general) and lower education levels. Therefore, SMK as an educational institution that has the responsibility to prepare the workforce must take strategic steps in order to provide competency experience to students in accordance with the current state of the business/industrial world. Some steps that can be taken are to improve the competence of quality human resources, prepare adequate facilities and infrastructure with technological developments and always carry out an innovative and sustainable learning process.

In achieving its goals, schools as educational institutions are often required to form cooperation with various relevant stakeholders . According to Kompri (2014) in the context of schools, stakeholders are school communities who are citizens or individuals who are in schools and around schools who are directly or indirectly related to school management, have social awareness and have an influence on schools. Stakeholders are all related components that have the same rights and obligations in planning, implementing and supervising educational programs. In terms of stakeholders, it is generally defined as stakeholders.

Regulation of the Minister of Industry of the Republic of Indonesia Number 3 of 2017 concerning guidelines for fostering and developing Competency-based Vocational High Schools that are Link and Match with industry, in article 2 (ab) states that: (a) Vocational High Schools in building and administering competency-based vocational education that links and match with industry, and (b) Industrial companies and/or industrial estate companies in facilitating the fostering and development of Vocational High Schools to produce competent industrial workers. Furthermore, the Regulation of the Minister of Industry of the Republic of Indonesia Number 3 of 2017 Chapter II Article 10 Paragraph (3) explains that in the implementation of cooperation between Vocational Schools and the Business World/Industrial World in Industrial Work Practices (Prakerin) or Field Work Practices (PKL), industrial companies and companies industrial estates are required to provide teaching factory workshops, laboratories as places of practice and instructors as supervisors in the implementation of Prakerin/PKL. Vocational High School (SMK) as one of the educational institutions, has a vision and mission to produce workers who are able to fill professional jobs. With a professional workforce, it is

hoped that they will be able to become an advantage for the business world and industry in Indonesia in facing global competition. To produce professional graduates, learning must be as close as possible to the situation in the world of work. One way to improve the quality of graduates is to strengthen cooperation between industry and schools.

In relation to the implementation of partnerships between the business world and the industrial world with vocational schools, according to Ixtiarto (2016) many partnership activities can be developed by the program, including: (1) managing joint activity programs between education providers and partner institutions, (2) utilizing infrastructure facilities owned by partnering institutions, (3) funding programs to realize a program to be implemented, and (4) utilization/placement of graduates from educational institutions into the work sector or commodities needed by partner institutions. The implementation of cooperation with the industrial world includes: (1) Content validation, so that the learning activity materials included in the curriculum structure are in accordance with the needs of the world of work, (2) Industrial Visits (KI) are carried out to provide insight into the world of work that will be faced by the workforce. students, (3) Guest Teachers, aims to provide an overview of the company profile, help implement the learning process in schools to suit industry needs and provide direct learning materials to students (Hadam, Rahayu & Ariyadi, 2017).

According to Purnamawati (2019), the industrial partnership model with SMK or educational institutions is more oriented towards academic benefits. Partnerships are generally carried out for the transfer of service and production technology, transfer of knowledge/skills and transfer of learning technology. Several patterns of partnership between SMK and industry that provide academic benefits include the form of training (training model). there are 3 (three) training approaches, namely: the traditional approach (the traditional approach); approach the experience (the experiential approach), and a performance-based approach (the performance-based approach).

Efforts to establish a cooperative relationship between schools and industry is something that cannot be denied by SMK. The vocational education policy model in the form of link and match is a concept of the linkage between educational institutions and the world of work. With the linkage between educational institutions and the world of work, collaboration will be established so that students can do internships or do work practices at the company (Husein, 2019). The implementation of the link and match program between schools and industry is achieved through a learning process that involves industry. This is also related to one of the principles of link and match, namely improving education programs through curriculum synchronization, Field Work Practices (PKL) and industrial visits (Cahyanti, Indriayu, & Sudarno, 2018).

Muladi (2018) stated in his research which states that the collaboration between SMK and industry is very important for both institutions (schools and industry). The results of this research from Muladi also show that there is a positive and significant relationship between the cooperation of SMK and industry in relation to the competence and skills of teachers and students. Research conducted by Suroto and Nguyen Tien Hung (2018) concludes that a strong relationship between vocational education institutions and industry must be maintained so that schools can adapt and always adapt to the rapid development of technology in industry. Vocational schools must establish partnerships with industry to provide industry standard classes because they are beneficial for all parties, especially students. Industry partnerships with schools also offer authentic learning opportunities to students which benefit them to better understand and experience the technology in the industry as well as encourage positive attitudes among students towards careers in industry (Smit, Robin, Tofol, & Atanasova, 2021).

On the basis of this challenge, SMK SORE Tulungagung and PT. Telkom Indonesia cooperates in the link and match program to build competence in the field of fiber optic technology. SMK SORE Tulungagung is one of the private schools that organizes secondary vocational education that has ISO 9001:2015 standards and is accredited A. This collaboration was formed to answer the challenges of the industrial world and meet the school's expectations to prepare graduates who have work competencies in the field of fiber optic installation in accordance with standard at PT. Telkom Indonesia.

METHOD

This study uses a qualitative approach with a descriptive type of research, which means that this research was conducted with the intention of understanding the phenomenon of what was experienced by the research subject. This study aims to identify and describe the link and match program between SMK SORE

Tulungagung and PT Telkom Indonesia to form student competencies in the field of fiber optic technology. Qualitative research methods are used in finding, collecting, processing, and analyzing research data. The method is used because qualitative research is in-depth in order to find out the condition of a particular object or phenomenon.

The location of the research will be conducted at SORE Tulungagung Vocational High School and PT Telkom Indonesia Witel. Kediri. The source of data from SMK SORE Tulungagung is the Deputy Principal for Curriculum Sector and Deputy Principal for Public Relations, while the data source from Telkom Indonesia is the Account Manager. The selection of resource persons or informants in this study was based on the needs of researchers in data collection so that appropriate resource persons were selected according to their respective duties and functions within the scope of work of the link and match program between SMK SORE Tulungagung and PT Telkom Indonesia in the hope that researchers could obtain relevant information. accurate and complete in accordance with existing conditions in the field without any engineering elements.

In qualitative research, findings or data can be declared valid if there is no difference between what was reported by the researcher and what actually happened to the object under study. According to Sugiyono (2013) the validity of the data in qualitative research includes: (1) credibility (internal validity): depth, persistence, triangulation, using reference materials, negative case analysis, member check ; (2) transferability (external validity): reports are made to provide detailed, clear, systematic, and reliable descriptions, so that they are easily understood by readers; (3) dependability (reliability): audit of the entire research process; and (4) confirmability (objectivity): data certainty, data confirmation with informants.

Data analysis in qualitative research is carried out at the time of data collection, and after completion of data collection within a certain period. At the time of the interview, the researcher had analyzed the answers to the interviewees (Sugiyono, 2013). The stages of research carried out by researchers in carrying out research are as follows: (1) preliminary study, introduction to the condition of the research object and for research preparation; (2) the pre-field stage, preparation of research proposals, processing of research permits, and preparation of research implementation; (3) the field stage, is the stage of data collection that is focused on the object of research, namely the resource person from PT Telkom Indonesia Witel. Kediri and Tulungagung SORE SMK; (4) the data analysis stage, reading, analyzing, interpreting, classifying, and interpreting the data obtained to draw conclusions; and (5) report preparation stage.

RESULT

The results of research on the link and match program between SMK SORE Tulungagung and PT Telkom Indonesia in the field of fiber optic technology have so far been carried out in the form of: (1) curriculum alignment in industrial class in fiber optic technology, (2) teacher human resource training activities in technology fiber optics, (3) procurement of facilities and infrastructure to support fiber optic installation practices in schools, and (4) implementation of learning activities in schools, and (5) implementation of learning activities in industry.

The alignment of the curriculum in the industrial class in the field of fiber optic technology was marked by the signing of a cooperation agreement between SMK SORE Tulungagung and Telkom Indonesia in 2018 to foster and develop competency-based SMKs that link and match with industry. Curriculum preparation is carried out jointly between Vocational Schools and industries related to fiber optic technology which aims to equip students with competencies that are in accordance with industry needs. As for the follow-up to the signing of the cooperation agreement, teacher human resources in the field of fiber optic technology are needed as well as facilities and infrastructure to support the practice of fiber optic installation in schools. The teacher's human resources are needed as a medium for technology transfer between industry and students as targets in the formation of their competencies. Meanwhile, facilities and infrastructure to support practice in schools are absolutely necessary so that students can interact directly with technology that is suitable for the industry. In this case, SMK SORE Tulungagung and PT Telkom Indonesia built a fiber optic network simulation laboratory at the school to support learning and learning activities in accordance with the agreed curriculum alignment results.

The implementation of learning activities in the link and match program is carried out by forming a special study group on Computer and Network Engineering Expertise Competencies. The aligned curriculum is delivered to the class in the form of additional 4 (four) hours of lessons per week. Meanwhile, the

implementation of learning activities in industry is carried out in Field Work Practice (PKL) activities at PT Telkom Indonesia. When carrying out street vendors, students will get direct guidance from practitioners or professionals in the fiber optic field. With such learning activities, students are expected to have sufficient competence as well as work experience in the field of fiber optic technology.

DISCUSSION

Based on the results of the research, the link and match program between SMK SORE Tulungagung and PT Telkom Indonesia began with the desire of the SMK to equip students with competencies relevant to industry needs as well as to improve the quality of SMK graduates. Therefore, in 2018 the SORE Tulungagung Vocational School began to discuss the link and match program with PT Telkom Indonesia, represented by Witel. Kediri, Regional Division V East Java. This spirit is in line with Presidential Instruction Number 9 of 2016 concerning Vocational Revitalization, as explained by the Directorate of Vocational High School Guidance (DITPSMK) in the SMK Revitalization Implementation Strategy (10 Steps to Revitalize Vocational High Schools) which states that the implementation of cooperation between SMK and the Business/Industry is good and mutually beneficial. Profitability is very important to support the achievement of school programs (Hadam, Rahayu & Ariyadi, 2017).

The existence of SMK itself cannot be separated from the need for skilled and competent workers in fields that are in accordance with industry needs. Partnerships between educational institutions and industry in the modern era are very useful as an effective tool to increase national competitiveness and need to be continuously developed in order to adapt to new global societal trends (Gazizova & Khuzina, 2015). Collaboration with industry is beneficial for students, skill competencies, and also the reputation of the school in general. Engagement with industry signifies that school leadership and management understand the needs of the labor market, and enables schools to adapt industry-relevant curricula and learning programs (Jonbekova, Sparks, Hartley & Kuchumova, 2020).

The collaboration in the link and match program between SMK SORE Tulungagung and PT Telkom Indonesia was marked by the signing of a cooperation agreement in 2018 regarding the Coaching and Development of Competency-Based Vocational High Schools that Link and Match with Industry. The signing of this cooperation agreement signifies the legitimacy of the program that will be carried out as well as proof of the commitment between the school and industry to organize a sustainable education program together. School development will be more optimal if the collaboration with related agencies in the business/industry world is relevant to the expertise competencies contained in the MOU/understanding/cooperation agreement text (Hadam, Rahayu & Ariyadi, 2017).

Curriculum alignment is a step to adjust the SMK curriculum to suit the demands of the industry, in this case it is competence in the fiber optic field as well as introducing the prevailing work culture in the industry. The purpose of this curriculum alignment is that the curriculum applied in vocational schools is in accordance with industry demands, so that it is expected that vocational graduates have competencies and work ethic that are in line with industry needs. According to Ixtiarto and Sutrisno (2016), curriculum alignment is one of the partnership programs between vocational schools and the business and industrial world. With the alignment of the curriculum between SMK and industry, students will get to know the industrial world which is their field of expertise which can later be used as a provision to work after completing their education (Farman, Malik & Lamada, 2019).

The curriculum used in the link and match program between SMK SORE Tulungagung and PT Telkom Indonesia was compiled together by involving practitioners from industry and the school. This curriculum is structured to be applied for 3 (three) years in Computer and Network Engineering Skills Competence (TKJ), which is given as an additional subject with a load of 4 (four) hours of lessons per week. The learning materials given are Fiber To The Home (FTTH) Network Installation given in class X and class XI, as well as Web Programming material given in class XII. The FTTH Network Installation material was delivered since class X and was prepared as a competency provision for students in Industrial Work Practice (PKL) activities at PT Telkom Indonesia when they were in class XI later. It is hoped that after completing street vendors in industry, students will have complete competence in the field of fiber optic technology.

This is in line with what Prastyawan, et al. which states that students' industrial learning activities aim to condition students into the actual production process situation in industry, by presenting materials that are

combined with existing curriculum materials with material from the industry, so that synchronization occurs between the two materials (Prastyawan, Mustiningsih & Huda, 2017). An Australian study also demonstrated the importance of an industry aligned vocational education curriculum. The research journal states that students recognize that knowledge gained in theoretical subjects in the industry curriculum can be applied to problems in the workplace, while workflow practices and industrial culture are gained through work experience programs in industrial settings (Watters, Hay, Dempster & Pillay, 2013).

Human resources for teachers or teachers in vocational education have a very important role in achieving learning objectives. Therefore, the teacher training program is part of this link and match program. The teachers in charge of carrying out learning on the Fiber to The Home (FTTH) Network Installation material were first sent to PT Telkom Indonesia for training. This training aims to improve the competence of teachers so that they are expected to be able to convey material properly, accurately and completely to students. Teachers who have been given this training are given the responsibility to convey the knowledge and skills resulting from the training to students. Teachers who have conducted training or internships in industry are responsible for aligning the content of the school curriculum with the industry where the training or internship is located (Sauli, 2021).

Improving the competence of teachers who teach vocational fields in vocational schools is an effort that must be made in order to increase maximum mastery of the material in improving the quality of learning in vocational schools. This will have an impact on increasing the abilities and expertise of students. The competence of productive teachers in vocational schools is the main key for the continuity of the learning process that has an impact on its output, namely competent students (Joko, 2021). As also stated by Serafini (2018) in his research which states that the continuous professional development of vocational school teachers is very important and must be done because the risk is that the quality of teachers as educators will lose contact with the latest developments in the fields of knowledge, skills and competencies that will needed by the labor market for their students (Serafini, 2018). The same opinion was conveyed in a research journal conducted in Sweden which stated that maintaining vocational competence to be in line with industry is very important for all teachers in the vocational field. This is especially important in education systems with high levels of school-based learning and as a teacher's responsibility for vocational learning to students (Andersson & Köpsén, 2017).

The aspect of the availability of facilities and infrastructure to support practice in schools is absolutely necessary so that students can interact directly with technology that is suitable for the industry. Based on the results of our research with stakeholders in schools and industry, SORE Tulungagung Vocational School and PT Telkom Indonesia built a fiber optic network simulation laboratory in schools to support learning and learning activities in accordance with the agreed curriculum alignment results. The school has the responsibility to meet all the needs for educational support facilities and infrastructure according to industry standards in the context of student practicum needs at school. Meanwhile, the industry is responsible for providing support in providing practical facilities and infrastructure in the form of standardization of equipment and technical support.

The fiber optic network simulation laboratory at SMK SORE Tulungagung was built with the standardization of PT Telkom Indonesia. Consists of passive networks ranging from FTM (Fiber Termination Management) network simulations, ODC (Optical Distribution Cabinets), ODP (Optical Distribution Points), to customer networks. There is also a simulation of the installation of ground cable networks, aerial cables and drop cables to customers. Hand tools, personal protective equipment and practical materials are also prepared in this laboratory, following the standards of PT Telkom Indonesia. The facilities and infrastructure are used to support learning activities on the Fiber to The Home (FTTH) Network Installation material which is the focus of this link and match program.

In addition to industry-standard curricula and teaching staff who master industrial competencies, the learning environment should also be industrial-standard, in the sense that the learning process of this link and match program presents an industrial working atmosphere, industrial culture, and has industrial characteristics. This industrial standard learning environment is also supported by facilities and infrastructure that are updated every year so that later students will not be surprised when they enter the world of work because every year the industry always develops its technology (Farman, Malik & Lamada, 2019). To present an industrial working atmosphere, it requires commitment and support from the management or school leaders, especially regarding the allocation of funding. The presence of a fiber optic

network simulation laboratory is a form of commitment and support from management or school leaders to improve student competence in the field of fiber optic technology.

This is in line with the results presented by Silva et al. in 2020 in his research in Brazil which stated that one of the strategies to obtain effective educational programs that meet students' expectations of learning outcomes and employability, vocational school leaders should provide access to facilities and resources that are in accordance with industry standards (Silva, Mendes, Ganga, Mergulhão & Lizarelli, 2020). The role of school management and leadership is very important in supporting this link and match program policy. As revealed in a research journal conducted in Australia, vocational school leaders need to develop new understanding, abilities and skills to build partnerships with industry and need to secure financial resources to increase the effectiveness and sustainability of vocational education programs (Klatt, Angelico & Polesel, 2017).

Curriculum alignment, teacher training activities, and provision of facilities and infrastructure to support learning practices in the field of fiber optic technology are part of the preparation for this link and match program. The next activity is a learning activity based on a predetermined industrial curriculum. Learning activities are carried out in two locations, namely learning in schools and learning in industry. This is done so that student competencies are formed in accordance with the demands of the business world/industrial world and in accordance with the demands of the curriculum in general.

Learning in schools is carried out using a curriculum and material that has been determined jointly between schools and industry, in this case SMK SORE Tulungagung and PT Telkom Indonesia. Acting as teaching teachers in learning at this school are teachers from schools who have received training on fiber optic technology from PT Telkom Indonesia. The learning material that is the focus of this program is the Fiber To The Home (FTTH) Network Installation which is carried out at the fiber optic network simulation laboratory at SMK SORE Tulungagung. The availability of facilities and infrastructure in the form of a simulation of fiber optic network installation, equipment and materials in the laboratory is deemed sufficient to meet the needs in the learning process. Even so, there are still tools that are the only ones in the laboratory. However, it is felt that learning can still run smoothly, by being used interchangeably.

To further strengthen understanding and increase students' motivation in learning, a guest teacher activity was held from PT Telkom Indonesia practitioners. This guest teacher activity invites fiber optic technology practitioners from PT Telkom Indonesia to teach, provide material, as well as motivate students to better understand and be skilled in applying fiber optic technology according to industry standards. The knowledge, skills and experience possessed by practitioners from industry are expected to be absorbed and can add new insights and experiences for students. As stated by Clarke (2021) in his research journal which states that as practitioners, they have the potential to make a significant contribution to learning outcomes and help prepare students for future jobs (Clarke, 2021). Other research in Australia has also shown the benefits of guest teacher activities bringing in practitioners from industry. The results of the survey conducted clearly show that students consider the learning provided by industry professionals to be very important, interesting, and enjoyable. Students recognize the importance of the relationship between school and industry and value the opportunity to learn from those who are practicing in the field they may wish to enter upon graduation (Gentelli, 2015).

In addition to learning in schools conducted by trained teachers from schools and guest teachers from industry, learning related to fiber optic technology is also carried out in industry, in this case PT Telkom Indonesia, through Field Work Practices (PKL). This PKL activity is carried out when students enter Class XI for 6 (six) months. The schedule for implementing street vendors is prepared by the school taking into account the considerations of the industry. During the PKL activities, students are placed in the PT Telkom Indonesia Office which is under the coordination of Witel. Kediri Regional Division V East Java. The industry appointed several field supervisors to provide direction, guidance, and monitoring to each student participating in street vendors. In addition, the school also prepares mentors from school teachers to monitor and monitor street vendors' activities. Monitoring activities are carried out several times during the 6 (month) PKL period in the industry.

During this street vendor activity, students can apply and hone competencies in the field of fiber optic technology that they have acquired at school, as well as gain hands-on relevant experience in industrial areas. Students also feel a real working atmosphere at PT Telkom Indonesia, both in terms of discipline, work culture, and other values. Students' ability to communicate professionally is also something that is trained during

these street vendors activities, so that students no longer feel awkward or embarrassed to be in a large and professional industrial environment like PT Telkom Indonesia.

Several research studies have shown positive benefits from Field Work Practice activities. In implementing PKL students are trained to have self-confidence, good work attitude, high motivation, easy to adapt and gain experience after PKL activities end, and have benefits for the development (cognitive, affective and psychomotor) of students (Firmansyah, Rokhmawati & Wicaksono, 2019) . During PKL, students have the opportunity to work in the same team with qualified and experienced people, and can better understand work relationships and work processes. In terms of competencies that can be obtained in schools, schools need to first build knowledge and basic competencies in students (Melnic, Trandafir & Dumitrescu, 2016). Internships or field work practices, make students participate in practical work by asking questions, performing various routine and new tasks to become more skilled and confident according to the vocational field, and learning to associate knowledge and skills to successfully complete tasks in the workplace (Guile & Lahiff, 2016). Theoretically, a study in Vietnam revealed further insight into the dimensions of learning outcomes related to street vendors. There are 5 (five) dimensions of learning outcomes related to PKL activities, namely (1) applying the knowledge and skills acquired during class into real practice in the field, (2) further developing professional knowledge and skills, (3) changing attitudes and behavior towards learning, (5) establish communication with professionals, and (5) form further career paths (Nghia & Duyen, 2019).

CONCLUSION

The link and match program between SMK SORE Tulungagung and PT Telkom Indonesia in the field of fiber optic technology is carried out in the form of: (1) curriculum alignment in the industrial class in the field of fiber optic technology which is carried out jointly between schools and industry on Fiber To The Home Network Installation material (FTTH) which aims to equip students with competencies in accordance with industry needs, (2) teacher human resource training activities in the field of fiber optic technology, (3) procurement of facilities and infrastructure to support fiber optic installation practices in schools by building a fiber optic network simulation laboratory. in schools to support learning and learning activities in accordance with the agreed curriculum alignment results, (4) implementation of learning activities in schools carried out by trained teachers from schools and visiting teachers from industry, and (5) implementation of learning activities in industry through practical activities Field Work (PKL) d i branch of PT Telkom Indonesia which is under the coordination of Witel. Kediri Regional Division V East Java.

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