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MANAGEMENT OF INDUSTRY COOPERATION AND THE WORLD OF WORK (IDUKA) WITH SMKN 1 TAPAKTUAN CONCENTRATION OF EXPERTISE (TKJ) ON FIELD WORK PRACTICE EXPERIENCE

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ABSTRACT

Management of Industrial Cooperation and the World of Work (IDUKA) between SMK Negeri 1 Tapaktuan Concentration of Expertise (TKJ) and increasing practical fieldwork experiences for students. IDUKA is a collaborative program that aims to facilitate opportunities for collaboration between schools and the industrial world to better prepare students to enter the world of work. This article describes how Tapaktuan 1 Public Vocational School establishes partnerships with various companies in the technology and computer network sectors, providing opportunities for TKJ students to take part in apprenticeship programs or field work practices. The benefits of IDUKA and practical work experience are significant, as students gain insight into industrial work processes and opportunities to interact with experienced professionals, as well as reduce the gap between the world of education and the world of work. Periodic evaluations are also recognized as important to ensure that the IDUKA program is always relevant to industry developments that are constantly changing. This program is a clear example of how collaboration between schools and industry can improve the quality of education and student career preparation. Overall, this article concludes that the Management of Industrial Cooperation and the World of Work (IDUKA) between SMK Negeri 1 Tapaktuan Concentration of Expertise (TKJ) provides great benefits for students in preparation for the world of work. This collaboration is a clear example of how collaboration between schools and industry can improve the quality of education and student career preparation.

Keywords: *SMK Management Collaboration with IDUKA Improves PKL Experience*

INTRODUCTION

Vocational education plays an increasingly crucial role in preparing qualified and competitive workforce in the fast-growing industrial world. The High School of Education (SMK) as a vocational educational institution plays an important role in printing graduates who have competencies and skills in accordance with the demands of the workplace. However, amidst the rapid development of technology and industry dynamics, many SME graduates struggle to find employment due to lack of practical experience relevant to industry demands. High Schools (SMK) are required to meet the needs of the community for quality workforce. so that students must have skills and attitudes in their fields. According to the objectives of the High School of Education (SMK) in the curriculum of SMK Dikmenjur (2008: 9), students and graduates are expected to: (1) Enter the world of work with a professional attitude. (2) Have the ability to develop and compete. (3) Become a graduate who can meet the needs of the business world industry. (4) Become a productive, adaptive and creative workforce.

In this turbulent era of the Industrial 4.0 revolution, technological transformation has drastically changed the workplace landscape (Faizal et al. 2018). Innovation and the development of information and communication technologies have brought major changes in every industry sector, which affect the demands and needs of different workforce (Suharyanto and Mailangkay 2016). As a result, the need for human resources that have technical skills, adaptability, as well as the ability to think critically and creatively is increasing. In facing these challenges, SMK Competence Concentration (TKJ) plays a crucial role in printing qualified and relevant graduates to the world of industry. However, despite the efforts made by SMK in aligning its curriculum with industry demands, the gap between the world of education and work is still a problem that needs to be overcome.

Support from the industry is also important in creating successful field practice work experience. Nevertheless, the industry must actively participate in providing relevant training and instruction to students during field work practice. Field work practice can be seen as a long-term investment to find young talents and help the development of the industry. The Iduka program and fieldwork practice at the SMK Expertise Concentration (TKJ) is an important step in preparing the younger generation for the challenging world of work. The IDUKA program gives TKJ graduates the opportunity to engage in a real

working environment, adapt to the latest technologies, and develop skills that fit the field of work they want (Faturohman, at el 2022). In addition, it is important to keep in mind that the government supports the implementation of IDUKA and in addition, the practice of field work is essential for success. It is necessary to consider policies that support cooperation between the world of education and industry, incentives for companies to join field work practices, and appropriate supervision by authorities (Liem 2022).

The implementation of Iduka in the SMK Expertise Concentration (TKJ) will be covered in greater detail in this article, along with how field work procedures are crucial to raising the caliber of graduates.

1. The Important Role of Vocational Education and the Challenge of SMK Graduates.

Vocational education has grown in importance as a means of supplying a high-quality labor force that adheres to international norms. We will give a thorough review of the advantages, difficulties, and prospects of Iduka in appealing to the younger generation who are prepared to participate in a dynamic and competitive workplace using the most recent research and references. However, a lot of SME graduates have trouble obtaining work due to competition in fields with tougher workplace regulations and industries with higher standards. “The biggest obstacle encountered According to the industry's minimum requirement for practical experience in the field of employment by SMK graduates causes a gap between the graduates' skills and the requirements of the work (Liem 2022).

2. Knowledge of Industry Cooperation Management and the Working World (IDUKA)

Knowing about Management of Industrial Cooperation and the World of Work (IDUKA) is an approach that aims to organize education with the needs of the industry. To support and benefit each other, educational institutions, business, government, and society work closely together. Its main objective is to improve the quality of SMK graduates and print human resources that are ready to work in the industry stated that “IDUKA is a strategic step to address the challenge of lack of relevance of educational curriculum to the demands of the world of work. IDUKA will encourage collaboration between industry and the world of education (Darma, Suastawa, and Putrawan 2022). This will have a positive impact on industry productivity and the quality of graduates.

3. Concentration of Skills (TKJ) in IDUKA

SMK Expertise Concentration (TKJ) with Computer Engineering and Networking is one of the examples of IDUKA'S success in connecting the world of education with the industry. The TKJ program aims to produce graduates who are competent in the field of information and communication technologies. However, relying only on theoretical learning in the classroom is not enough to face complex workplace challenges. "IDUKA programs and field work practices at SMK TKJ provide valuable opportunities for students to experience real situations in the world of work. It helps them develop practical skills and understand the demands of the workplace."(Liem 2022).

4. Practical field work experience as a solution

Experience of field work practice became the core of IDUKA cooperation between TKJ SMK with industry. This program allows TKJ students to work directly in companies or organizations relevant to their field of expertise. During the practice period, students will be guided by the faculty of the school and receive guidance from experienced practitioners in the industry. "Practical fieldwork experience provides great benefits for TKJ students in sharpening practical skills, learning to work in teams, and facing real technical challenges in the world of work". In addition, practical field work experience also opens up opportunities for students to build professional networks with practitioners in the industry (Islamiah, Hariyati, and Murtadlo 2022). This can open the door to future job or internship opportunities.

5. Fieldwork Practice and IDUKA Benefits for TKJ Students

Students at TKJ can benefit significantly from Iduka programs and field work skills as they become ready for careers in the workforce (Andayani 2021). Benefits, including:

a. Gain practical experience related to their area of specialization, which hones abilities and improves comprehension of market expectations.

b. Create a professional network with professionals in the field to increase your chances of landing a job or an upcoming internship.

c. Deepen understanding of the workplace and expose students to genuine issues in order to better prepare them for a dynamic work environment.

d. Improve soft skills like leadership, teamwork, and communication, which are crucial in the workplace.

6. Obstacles to IDUKA Implementation and Fieldwork Practice

Despite their many advantages, IDUKA and field work practice programs have their share of drawbacks as well. Among the difficulties we frequently encounter are:

a. The intricate coordination required to implement IDUKA collaboration among educational institutions, business, the government, and society.

b. A cap on the number of businesses or organizations ready to join forces with one another to create a field work practice program.

c. Fieldwork practice travel and lodging expenses for students, which may be prohibitive for individuals or expensive for educational institutions.

d. Disparities between industry and educational expectations for the caliber and readiness of graduates.

Higher Education School (SMK) graduates should be able to find employment right away because they have the expertise to go along with their expertise competency. Due to the high rate of unemployment, the school must solicit community input when developing the program it will implement. This is true because society uses the output (output) that the school produces (Sudarma, Tanjung, and Junaidi 2023). The link between the school and society Education Management, is a process of communication with the goal of strengthening citizens' awareness of the needs and practices of education and attempting to improve the school (Liem 2022). Additionally, the school's partnership with the community aims to: (1) improve educational standards and children's development growth, (2) improving the community's quality of life and way of life, and (3) inspiring the community to form partnerships with the school (Rochim and Nurhayati 2023).

The High School (SMK) needs to be aware of the wants and requirements of the IDUKA party in order to implement collaboration effectively and manage learning in the school. Regarding IDUKA, they are anticipated to be able to act as a facilitator in offering learning facilities for the area where students can put the knowledge they have learned in school to use as well as initiatives to introduce students to the working world and provide work experience for students to improve their competence. Based on the findings of research done by the PKL team at SMKN 1 Tapaktuan, it is known that the SMK program collaborates with IDUKA to generate qualified graduates who are compatible with the job market in order to fulfill its aims. Each year, SMKN 1 Tapaktuan

and IDUKA continue to build and strengthen their collaboration program. The planned program covers schedule, timing constraints, needs, objectives, and PKL assessment.

METHODS

Combining the use of literature reviews with interviews. The purpose of this essay is to provide a thorough overview of the application of IDUKA in SMK TKJ, hence the use of literature study methodologies is pertinent. The references the authors find and collect contain data that has been processed, analysis, and findings from prior studies, which will serve as the foundation for comprehending the issues and difficulties associated with implementing IDUKA in TKJ SMK. Getting Qualitative Information Authors can get qualitative information from interviews that isn't found in literary studies. The comments and responses of the respondents offer a more intimate and thorough insight of their experiences with and opinions about the application of Iduka in TKJ. The interviews also aid authors in comprehending the viewpoints of the numerous stakeholders involved in the implementation of IDUKA, such as educators, students, members of the school administration, and business representatives. A more complete picture of the problems and potential solutions must be presented.

RESULTS AND DISCUSSION

Before collaborating, SMKN 1 Tapaktuan first organized the SDM (Human Power Resource) that belonged to the institution in accordance with the TKJ Competence Concentration. The school then performed an analysis of the requirements for the ties between the school and IDUKA. The school will identify IDUKA parties that match TKJ's competence after completing a need analysis. Because SMKN 1 Tapaktuan has unique standards for selecting partnerships that align with TKJ Expertise Concentration, this is done. These collaborators need to be reputable and have goals and directions that align with the focus of TKJ expertise at SMKN 1 Tapaktuan. The school will communicate with the IDUKA party after one has been located to further develop the two parties' partnership. The school and IDUKA will create a Memorandum of Understanding (MoU) as a framework in the implementation of school ties with IDUKA if collaboration has been increased and both sides have examined each other's needs.

This article can present a thorough overview of the implementation of Industrial Cooperation and Labour World Management (IDUKA) in SMK Computer Engineering and Networking Expertise Concentration (TKJ) after identifying, choosing, and analyzing information using literature study and interview methods. The outcomes and discussions around the use of this technique are as follows:

A. Findings from Literary Studies; compiling sources and information about IDUKA and its use in SMK TKJ. The findings of this literary analysis cover the fundamental ideas behind IDUKA, its implementation strategies, advantages for students and business, as well as the difficulties encountered during this process. A solid theoretical framework is provided by data from literary studies to support the article's further examination and conclusions.

B. Interview Results; This article obtained firsthand insights and experiences from respondents through interviews with pertinent parties, including TKJ teachers, students, school administration staff, and industry representatives. The findings of these interviews contain qualitative data on the experiences of students during fieldwork practice, challenges encountered by educational institutions in operating IDUKA programs, as well as comments from industry on the caliber of graduates and their compatibility with job-place requirements.

Based on discussions and research on numerous IDUKA in TKJ implementation-related topics. The conversation covers:

A. IDUKA's benefits; raising the standard of SMK graduates. The hands-on fieldwork experience enables students to hone practical skills and gain a deeper understanding of industry demands. Additionally, working with business gives students the chance to develop their professional networks and find potential internship or employment opportunities.

B. IDUKA implementation obstacles encountered during IDUKA'S deployment in TKJ. The restriction on the number of partner companies, the expense of travel or lodging during fieldwork exercises, and the intricate cooperation between educational institutions, business, government, and society are only a few of the difficulties.

C. Support from the government for IDUKA'S implementation. The implementation of IDUKA in TKJ SMK will be strengthened through policies that encourage collaboration between the fields of education and industry, provide incentives for businesses to join forces in field practice, and provide enough oversight from authorities.

As one of the educational institutions of the SMKN 1 Tapaktuan, profession has the main task and function of being a facilitator for the students to gain knowledge and direct them in a skill or area of expertise. This helps the school in the process of improvement and development of talents and interests with the hope that the learners can have competitiveness and prepare graduates who are ready to enter the workplace. Based on the findings of the Grand Tour Observation, SMKN 1 Tapaktuan carried out school relationship activities with IDUKA with the following goals: (1) students can complete industrial work practices (PKL) in businesses or institutions relevant to their field of study; (2) the completion of industrial work practices (PKL) becomes a requirement for graduation for students; (3) the school can be aware of the requirements for the required workforce of IDUKA; and (4) the senior class can participate in industrial work practices (PKLThe management of school relationships with IDUKA has had a significant impact on the caliber of graduate students in accordance with the students' capacity to meet IDUKA's needs for the necessary workforce.

The parties involved in the implementation of the management of school relations with IDUKA are: (1) the representative of the head of the school in the field of public relations/industrial relations (Humas/hubin); (2) the Special Work Exchange (BKK); and (3) the guidance of dissemination and counseling (BP/BK). also have worked with various parties of IDUKA. MoU (Memorandum of Understanding) or Note of understanding of the school with IDUKA Cooperation school with the IDUKA party in SMKN 1 Procedure is carried out on the basis of field work practices. (PKL). PKL is a form of professional or professional education organization that unites education in schools and learning programs obtained through direct work activities in relevant fields of work within IDUKA to the mastery of certain abilities and skills.

According to data searches, IDUKA parties that do not work with SMK N 1 Tpaktuan appear to have taken on the majority of the working SMKN 1 Tapaktuan. SMKN 1 Tapaktuan's intake data from graduates who have worked in a variety of Concentrations of expertise show that more participants are trained in the Concentration of TKJ expertise that is absorbed by IDUKA due to the many mastery of computer skills among both those who have already worked with SMKKN 1 Tapaktuan and those who have not yet.

There are several steps that can be taken to Implicate for the future implementation of IDUKA in TKJ. Active cooperation with Industry; SMK TKJ needs to continue to strive to expand the network of collaboration with various industries related to computer technology and networking. The active collaboration will open up opportunities for internships, industry visits, and collaboration in developing relevant curricula. Development of an Adaptive

Curriculum; SMK TKJ must adopt an adaptive and responsive curriculum approach to technological developments. Adjustment of the curriculum periodically becomes the key so that graduates of SMK TKJ have relevant and up-to-date competencies. Strengthening Teacher Qualifications; TKJ Teachers need to get training and competence development on a regular basis so that they can teach relevant and up-to-date materials. Industry practice experience for teachers can also improve the quality of teaching in the classroom. Collaborative approach with government; Collaboration with government is key to creating policies that support the implementation of IDUKA. Governments can provide institutional incentives and support to strengthen cooperation between educational institutions and industry

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CONCLUSION

The following conclusions about the application of IDUKA in the SMK Computer and Network Engineering (TKJ) Expertise Concentration are based on the findings and discussion of methods of application of literature studies and interviews:

The implementation of IDUKA at SMK Computer and Network Engineering Expertise Concentration (TKJ) has a great deal of potential to produce graduates who are qualified and prepared for the workplace. Students can gain substantial benefits from practical fieldwork experience in terms of honing practical skills and adjusting to the real working world. Collaboration with business provides students with chances to develop their professional

networks and find potential internship or employment opportunities. IDUKA'S implementation, however, confronts a number of obstacles that must be overcome, including a lack of industry partners, high transportation costs, and difficult coordination. The best way to implement IDUKA is through government assistance in the form of incentives and policies.

Cooperation between educational institutions and business will become more robust by resolving current issues and bolstering government assistance, and graduates of SMK TKJ will be better equipped to handle a dynamic and competitive workplace. The future of IDUKA'S implementation in SMK TKJ will be heavily influenced by active industrial participation, the creation of adaptive curricula, the improvement of instructors' credentials, as well as support and supportive government policies. With these steps, SMK TKJ can continue to innovate in elevating the standard of education and dazzle graduates who grow to be proud in the world of networking and computer technology.

REFERENCES

Akmaluddin, Rosmala Dewi, Syawal Gultom, and Darmawati. 2020. "Pengaruh Persepsi Guru Tentang Kepemimpinan Partisipatif Kepala Sekolah Dan Motivasi Kerja Terhadap Komitmen Afektif Guru Sma Negeri Kota Banda Aceh." Visipena Journal 11(1):132–45. doi: 10.46244/visipena.v11i1.1075.

ANDAYANI, FRANSISKA. 2021. "Meningkatkan Kinerja Guru Produk Kreatif Dan Kewirausahaan Melalui Program Sekolah Pencetak Wirausaha." MANAJERIAL : Jurnal Inovasi Manajemen Dan Supervisi Pendidikan 1(2):175–81. doi: 10.51878/manajerial.v1i2.647.

Darma, IKetut, I. Wayan Suastawa, and I. Made Agus Putrawan. 2022. "Level of Curriculum Relevance for Diploma 3 (D3) Mechanical Engineering at Bali State Polytechnic (BSP) with Competencies for Industry, Business, and Work (IDUKA) in Bali." Proceedings of the International Conference on Applied Science and Technology on Social Science 2022 (ICAST-SS 2022) 3:235–41. doi: 10.2991/978-2-494069-83-1_42.

Faizal, Mochammad, Muhammad Faqih Abdillah, Dea Aulia Sari I.M.S, Wahyu Setiadi, Denisha Octavia, Wulan Suhendari, and Didit Widiatmoko Soewardikoen. 2018. "Penggunaan Website

Portal Berita Sebagai Media Informasi Untuk Mahasiswa." Jurnal Bahasa Rupa 2(1):34–42. doi: 10.31598/bahasarupa.v2i1.217.

Faturohman, Nandang, Suherman Suherman, and ... 2022. "The Pattern of Vocational School Partnership with Industry and the World of Work (IDUKA) In Order to Increase the Absorption Of Graduates of Setiabudhi Vocational School Rangkasbitung." Journal of Positive School Psychology 6(5):5191–97.

Islamiah, Nia, Nunuk Hariyati, and Murtadlo Murtadlo. 2022. "Strategi SMK Dalam Menjalin Kerjasama Reciprocal Dengan Industri Dan Dunia Kerja." Jurnal Akuntabilitas Manajemen Pendidikan 10(2):180–89.

Liem, S. S. 2022. "Strategi Pembelajaran Untuk Mengatasi Kesenjangan Antara Dunia Pendidikan Dan IDUKA." Prosiding Seminar Sastra Budaya Dan Bahasa ….

Mardhatillah, Siti Mayang Sari, Herman Surjono, and Ali Muhtadi. 2019. "Development of Teacher and Student Thematic Learning Books Based on Gender and Diversity for Elementary School Students in District of Aceh Barat." International Journal of Scientific and Technology Research 8(10):896–98.

Rochim, Adian Fatchur, and Oky Dwi Nurhayati. 2023. "Local Adaptive Curriculum Model (LACM) as An Alternative to Address Competency Gap Between Vocational School Graduates and Industry." 5328–39. doi: 10.46254/an12.20221073.

Sudarma, Teguh Febri, Ratna Tanjung, and Agus Junaidi. 2023. "Digitalisasi Pendidikan Melalui Penerapan Ict Bagi Sekolah Di Desa Saentis Kecamatan Percut Sei Tuan." Jurnal Pengabdian Pendidikan Masyarakat (JPPM) 4(1):71–79. doi: 10.52060/jppm.v4i1.1067.

Suharyanto, and adele B. L. Mailangkay. 2016. "Penerapan E-Learning Sebagai Alat Bantu Mengajar Dalam Dunia Pendidikan." Jurnal Ilmiah Widya 3:17–21. doi: 10.1016/j.neubiorev.2016.02.001.