



EMPOWERING EDUCATORS THROUGH TRAINING, INTERNSHIPS, AND TEACHER COMPETENCY CERTIFICATION WITH SCHOOL INDUSTRY PARTNERS (CASE STUDY OF SMK MUHAMMADIYAH 7 GONDANGLEGI)

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Abstract

Educator empowerment through industry partners can be done in various ways. SMK Muhammadiyah 7 Gondanglegi collaborates with United Tractors (UT) and has various programs. And the programs they provide for educator empowerment programs are training, internships, and teacher competency certification. This research aims to find out how the empowerment of educators through industrial partners (UT) industry partners (UT) with training, internships, and certification can improve the quality of graduates at SMK Muhammadiyah 7 Gondanglegi. This research uses qualitative research methods with case study design and narrative analysis techniques. Data sources were obtained through interviews, observations, and document analysis. This research is also supported by literature studies through review of scientific articles, journals and relevant sources. The result of this research shows that empowerment by UT to educators at SMK Muhammadiyah 7 Gondanglegi through training, internships, and teacher competency certification is effective. Through training, internships, and teacher competency certification proved to be effective in improving the competence of educators. And with the competence of educator competence through training, internships, and teacher competency certification can also improve the quality of graduates at SMK Muhammadiyah 7 Gondanglegi.

Keywords: Educator Empowerment; Industry Partners; Graduate Quality

1. Introduction

Education is not merely the transfer of knowledge, but also the process of acquiring knowledge (Sunarso, 2020). Therefore, educators should focus on the transfer of values to ensure that the knowledge they impart is relevant to current and future situations. As such, human resource management in education plays a crucial role in improving the quality of educators in response to industrial developments. According to Marisyah & Firman in Pristiwanti et al. (2022), education does not only come from formal institutions but also requires the active involvement of families and communities as the foundation for the development of knowledge and understanding, as both are the first environments that shape an individual's character and competencies. Therefore, schools must collaborate with parents and the business world to create flexible curricula, provide practical training, and prepare students with the digital skills needed in the workplace.

According to Law Number 20 of 2003 on the National Education System, Article 39, paragraph 2, educators are professional personnel responsible for planning and implementing the learning process, assessing learning outcomes, providing guidance and training, and

conducting research and community service, particularly for educators at higher education institutions. In the learning process, educators are expected to effectively and efficiently impart knowledge to their students. To transfer knowledge effectively and efficiently, educators must be professionals. This professionalism can be achieved through continuous development. Thus, educators with sufficient competence and expertise can prepare their students to meet the needs of the business world and industry. Students must be prepared by educators who can create and combine various interesting teaching methods with adequate abilities and in line with the times, so that students can improve their abilities, quality, and understanding of the material taught (Pare & Sihotang, 2023).

Human resource management is a key factor in achieving goals and overcoming internal and external challenges, which is largely determined by the proper management of human resources (Ulfatin & Triwiyanto, 2020). Good human resource management will produce good human resources. Proper human resource management can be achieved by improving and developing the quality of human resources themselves. Human resource management manages development and empowerment needs, whose functions are to improve the competence, adaptability, and commitment of educators (Ulfatin & Triwiyanto, 2020). To adapt to educational institutions, human resource management can plan how to prepare and utilize these needs for schools (Husaini & Utama, 2021).

Empowering educators can be achieved through various strategies, some of which include providing training, internship programs, and competency certification in collaboration with industry partners. Teachers' competencies can be improved through training. According to Saleh in Firdaus and Hasanah (2017), training is a positive and systematic practice that brings about changes in perspective and attitudes, leading to improvements in cognitive, behavioral, and cognitive aspects as desired by the institution or organization. Training for educators is expected to enhance their quality in terms of knowledge, teaching methods, and the use of technology in learning. According to Fitri et al. (2019), there are three requirements that must be met for training to be considered effective: training must help employees improve their skills, training must bring about changes in habits, information, and knowledge that they apply in their daily work, and training must be related to specific tasks currently being performed or tasks that will be assigned in the future.

Utami in Sabon, et al. (2020) stated that professional teachers can take part in internships as an important part of preparing professional teachers with dual authority. Educational internships are activities that provide initial experience for educators to build themselves, strengthen their competencies, reinforce the initial abilities of interns, and develop learning tools in building the interns' areas of expertise. Komar in Sabon, et al. (2020) discusses the benefits of internships, including: (i) schools and companies where internships are conducted can establish cooperation, (ii) schools can improve the quality of their graduates through work experience, (iii) schools will be better known in the industrial world, (iv) companies will receive assistance from interns who are conducting practical training, (v) companies become known to academic circles and the education sector, and (vi) there are individuals who audit companies without incurring costs through the internship reports provided to companies. Interns also benefit from internships, as they receive certificates from vocational training institutions upon completing the internship program and participate in competency assessments to obtain recognition of their competency qualifications.

According to the Law of the Republic of Indonesia Number 14 of 2005 concerning Teachers and Lecturers, Article 1, paragraph 11, certification is the process of issuing educator certificates for teachers and lecturers. The certificate received by educators serves as proof that they are professional educators. Educators as professional educators are considered very important because, by becoming professional educators, they already possess competencies that align with the standards required by the education sector and the industrial world. Therefore, the collaboration between schools and industry partners plays a crucial role in aligning classroom learning with the actual needs of the business and industrial sectors. Educators can prepare students to face the workforce.

The demand for practical skills continues to evolve alongside the changing needs of the business and industrial sectors. Through this collaborative empowerment strategy with industry partners, it is hoped that the quality of graduates can be significantly improved. The skills acquired by students are not merely theoretical but also competitive in the workplace because they possess adequate competencies aligned with industry standards. As mentioned by Mulyati in Sabon et al. (2020), the quality of vocational schools (SMK) heavily depends on the quality of graduates and the relevance of their skills to labor market needs.

This article will discuss how training, internships, and teacher certification with industry partners can be effective strategies in improving the quality of educators or empowering educators. It will also discuss the effectiveness of empowering educators through training, internships, and teacher certification with school industry partners in improving the quality of graduates.

2. Method

The method used in this study is a qualitative research method. Creswell in Safarudin, et al. (2023) defines qualitative research as a type of educational research in which researchers rely on the views of participants or informants: researchers ask extensive questions, asking general questions, data collection consists largely of words (or text) from participants, describing and analyzing the text into themes, and making subjective and biased requests (prompting further questions). In this study, the research design used was a case study design conducted at SMK Muhammadiyah 7 Gondanglegi. A case study is an empirical study that examines a phenomenon in real life, where the boundaries between the phenomenon and its context are unclear, and uses various sources of evidence (Syahrizal & Jailani, 2023).

This study used interviews as the main technique for collecting data related to the research focus. The research was conducted at a vocational high school, namely SMK Muhammadiyah 7 Gondanglegi, located at Jl. KH. Ahmad Dahlan No.20, Dusun Krajan, Putat Kidul, Kec. Gondanglegi, Kabupaten Malang, Jawa Timur 65174. In this study, SMK Muhammadiyah 7 Gondanglegi served as the research subject, with SMK Muhammadiyah 7 Gondanglegi educators who have been certified by industry partners as the research data sources. The analysis technique used in this study was Narrative Analysis. According to Saefullah (2024), this narrative analysis technique is used to analyze patterns of stories or narratives in data sources or documents, which helps in understanding how these stories are used to reinforce or challenge certain opinions or perspectives. The research activity was conducted on March 15, 2025. The interview results were used as the basis for discussion through qualitative methods.

3. Results and Discussion

3.1 Result

3.1.1 UT (United Tractors) industry partner strategy with educators in empowering educators to improve their quality through training, internships, and teacher certification.

Based on the results of interviews conducted by the author, it appears that the empowerment of educators carried out by industry partners through training, internships, and teacher competency certification is effective as a means of improving the quality of educators' competencies in terms of both knowledge and skills, enabling educators to apply more effective learning methods that are in line with industry needs.

SMK Muhammadiyah 7 Gondanglegi collaborates with industry partner UT (United Tractors). UT collaborates with SMK Muhammadiyah 7 Gondanglegi, particularly in the Heavy Equipment Engineering department. UT is an institution specializing in heavy equipment, mining, construction, and energy. UT has United Tractors for Education and Bright Future (UTFUTURE), which focuses on CSR activities in the field of education. The programs under UTFUTURE for its partner schools include developing software, hardware, and brainware for students, educators, and supporting facilities. This program is also aligned with the government's link-and-match program between the education sector and the job market, as well as Indonesia's adoption of Industry 4.0. The software component consists of four programs: (1) curriculum standardization, (2) student competency competitions, (3) SOBAT (United Tractors Partner School) Competition, and (4) production-based education. The second component, brainware, consists of seven programs: (1) teacher and student training, (2) teacher and student internships, (3) student competency testing, (4) teacher competency certification, (5) industry culture, (6) UT School recruitment, and (7) industrial visits. The final component of the programs implemented by UT for its partner schools is the hardware component, which consists of three programs: (1) teaching aids/practical tools, (2) classroom standardization, and (3) safety centers. The programs conducted by UT related to teacher empowerment include teacher training, teacher internships, and teacher competency certification. To obtain teacher competency certification, teachers must undergo training and internships conducted by UT.

Training has been conducted by UT for SMK Muhammadiyah 7 Gondanglegi since the onset of the COVID-19 pandemic. The training conducted by UT was carried out online. The materials presented by the experts to the educators focused specifically on heavy machinery. The materials were delivered in both text and visual formats, including animations. Offline training provided by UT to the educators at SMK Muhammadiyah 7 Gondanglegi began in 2023. Educators were invited to participate in the Basic Technical Course 2023 training

program or, if part of their school's development program for educators, the teacher competency certification program. This program was conducted over a period of three months. UT provided a structured training schedule for educators to acquire new knowledge through observation and hands-on practice. The training activities conducted in this program utilize face-to-face classroom instruction or theory in class. The observations involve direct learning from UT experts on how to use tools or engines to understand their components, functions, and structures. Through this learning method, BTC participants or educators are not only equipped with theoretical knowledge but also have the opportunity to directly apply the theories learned during the training in accordance with established standards.

After the training is completed, UT requires the implementation of OJT simulation or On-the-Job Training Simulation, also known as an internship. This OJT is conducted through direct practice in the heavy equipment industry work environment to observe and experience the actual work processes firsthand. This OJT provides educators with the opportunity to discuss and learn from heavy equipment industry experts who can provide insights into industry trends and challenges, enabling them to understand industry developments and how to address these challenges. Through this OJT, educators can understand industry work standards, allowing them to adapt their teaching methods in the classroom. OJT is highly beneficial for educators because it enables them to understand industry work standards, thereby enhancing their technical skills and readiness to teach students with a stronger focus on practical application. The final stage of the activity is the certification of educators' competencies by UT for participants of the BTC Training or educators. The activities include UT providing evaluations and training. Educators undergo evaluation sessions to measure the understanding and skills they have acquired during the training and OJT. This evaluation is conducted to ensure that each educator as a participant is fully prepared to take the certification exam conducted by the Indonesian Heavy Equipment Professional Certification Agency (LSP ABI). After the pre-certification process is completed, the next activity is the certification exam. UT designs this activity to assess and recognize educators' capabilities in the field of heavy equipment and technology, enabling them to apply these skills in teaching to align with industry standards. During the certification exam, activities include hands-on practice or demonstrations in operating and maintaining heavy equipment in accordance with applicable standards and procedures. This may include simulations of operation, diagnostics, and machine maintenance. The certification exam is conducted by assessors from LSP ABI who have the authority to evaluate educators' competencies according to standards. After the practical demonstration, a competency certification will be issued. Educators who are deemed competent in the certification exam will receive an official certificate from LSP ABI recognizing their competencies in a specific field.

3.1.2 The effectiveness of empowering educators through training, internships, and teacher competency certification with school industry partners in improving the quality of graduates.

The training, internships, and certifications provided by UT to educators at its partner schools have had a significant impact. Educators will have better competencies in their respective fields, aligning with existing industry standards, thereby enabling students to acquire the necessary knowledge and technical skills to navigate the workforce in both the business and industrial sectors. Through collaboration with UT SMK Muhammadiyah 7 Gondanglegi, the quality of education is enhanced by ensuring that educational materials align with real-world workplace needs (link and match). Efficiency is also achieved through the provision of heavy equipment grants, which educators can use in effective teaching methods by directly applying the material in real-world scenarios. This makes the learning process more effective, as educators possess the necessary competencies to facilitate learning through practical application. Learning becomes more productive with the use of real equipment and effective teaching methods, thereby enhancing students' academic, technical, and motivational skills to enter the workforce.

One of the impacts for schools supported by UT is the standardization of classrooms. Classroom standardization facilitates teachers in sharing their knowledge and providing hands-on experiences to students. The standardization implemented by UT includes the donation of practical tools and the establishment of a teaching factory workshop. The practical tools received by SMK Muhammadiyah 7 Gondanglegi include engines, tandem rollers, heavy equipment frames, motor graders, and various small components or tools to support students' hands-on practice in understanding the operation and maintenance of heavy equipment. The establishment of a teaching factory workshop by UT enables teachers to apply more effective teaching methods aligned with industry needs, thereby enhancing students' technical skills to meet industry standards. Collaboration with UT can improve the quality of education with educators who meet industry standards, thereby enhancing students' achievements and making the school recognized by the industry for its high quality. This high quality can increase the school's opportunities for collaboration with companies in Indonesia, making it easier for students to be recruited for employment.

Among the programs offered by UT is the UT School Recruitment Program. This program aims to identify the best prospective students interested in pursuing careers in heavy machinery through various selection processes and tests. Before the educators at SMK Muhammadiyah 7 Gondanglegi underwent teacher competency certification with UT, only one student was selected from the UT School Recruitment Program in 2022. However, after 2023, when educators had completed the teacher competency certification program with UT, the

number of students recruited increased significantly. By last year, 2024, UT School had recruited 15 students from SMK Muhammadiyah 7 Gondanglegi.

The high quality of the students has led other companies, not just UT, to recruit students from SMK Muhammadiyah 7 Gondanglegi. In 2024, PT HPI Sumba and East Kalimantan recruited 30 third-year students from the Heavy Equipment Technology department at SMK Muhammadiyah 7 Gondanglegi. The first batch departed in September 2024, and the second batch departed in February 2025. In addition to PT HPI Sumba and East Kalimantan, many other companies have recruited students from SMK Muhammadiyah 7 Gondanglegi. The empowerment provided by UT to educators at SMK Muhammadiyah 7 Gondanglegi through training, internships, and teacher competency certification has proven effective in improving the quality of graduates.

3.1 Discussion

3.2.1 UT (United Tractors) industry partner strategy with educators in empowering educators to improve their quality through training, internships, and teacher certification.

Based on the Regulation of the Minister of State for Administrative Reform and Bureaucratic Reform No. 16 of 2009 concerning Functional Teacher Positions and Credit Points, Article 6 states that one of the obligations of teachers in carrying out their duties is to continuously improve and develop their academic qualifications and competencies in line with developments in science, technology, and the arts. By continuously improving and developing their qualifications and competencies, educators will become effective teachers in delivering instruction to their students in the classroom. In line with Rosni (2021), educators equipped with strong and in-depth mastery of subject matter will guide their students toward meeting the competency standards set by national education standards. Educators with good competencies will produce good students and graduates compared to educators with less good competencies. Therefore, the ability or competencies of teachers are important factors that determine the quality of learning in the classroom. Competency improvement can be achieved by empowering educators. In line with Rohmah et al. (2023), empowering teachers influences the quality of education, as it can increase their knowledge and mastery of new skills, enabling them to overcome problems during the learning process at school. Empowerment to improve the competence of educators can be done, for example, in vocational schools, which can empower educators through partnerships with industry so that graduates meet industry standards.

According to Rojaki et al. (2021), collaboration between schools and the industrial world is essential due to the rapid technological advancements in industry, ensuring schools do not fall behind. Schools cannot provide all the equipment required by industry for the

learning process. Collaboration between schools and DUDI or between the education sector and the business and industrial sectors is an implementation of the “link and match” approach in education (Ramdhani & Adawiyah, 2023). Empowering teachers can be done through teacher training programs, teacher internships, and teacher competency certification. As stated by Fathoni in Ismiatun et al. (2024), several factors influence the quality of vocational school graduates, including how the school is run, the content of the curriculum, how students are assessed, collaboration with the workforce, the delivery of educational regulations, and the ability of teachers to teach.

Government Regulation of the Republic of Indonesia Number 74 of 2008 concerning Teachers Article 46 Teachers have the opportunity to develop and improve their academic qualifications and competencies, as well as to obtain training and professional development in their field. Improving the quality of educators can be achieved through training or professional development. Saydam in Fitri et al. (2019) explain that human resource development through education and training is an activity that organizations—both government agencies and companies—must undertake to ensure that employees' knowledge, skills, and abilities align with the demands of their jobs. Through such training, educators gain new knowledge and insights into real-world issues that they can share with their students.

Productive teacher internships are learning activities where vocational school teachers work directly in companies, guided by more experienced individuals, to learn and master specific skills or expertise in producing goods or providing services (Sabon et al., 2020). This activity aims to bridge the gap between the education sector and the industrial sector, enabling teachers to update their knowledge and skills in line with the needs and developments in technology and work processes prevalent in the business and industrial sectors (DUDI). In line with Sabon et al. (2020), teachers who receive guidance from DU/DI instructors during the internship will be able to fully utilize their experience by observing and analyzing the work competency standards they encounter during the internship as a basis for aligning with the competency standards that will eventually be conveyed to students at school. Thus, internships not only serve as a means of enhancing teachers' practical competencies but also play a crucial role in aligning school curriculum content with the needs and realities of the workplace, thereby making learning more relevant and contextual for students. According to Sitorus et al. (2021), the things that need to be done in the development of vocational education include ensuring the availability of skilled productive teachers through regulations that support the improvement of teaching competencies, improving the quality of practice facilities and infrastructure in accordance with the needs of the business and industrial world (DUDI), encouraging collaboration between vocational education institutions and DUDI through internship programs, and strengthening the role of associations, industries, and the

community in supporting sustainable vocational development.

There are several benefits of internships for interns themselves, namely obtaining a certificate from a job training institution if they have completed the internship program and taken a competency test to obtain recognition of their competency qualifications (Sabon, et al., 2020). Certification is a process of issuing certificates to educators, namely teachers and lecturers, as formal proof and recognition that they are professional personnel (Saragih et al., 2025). This aligns with the importance of competency certification for teachers, which not only serves as formal recognition of their professional abilities but also as a requirement for improving teaching quality and career advancement in the education sector. As stated by Ramdani & Jelatu (2024), teacher certification is expected to improve the quality of teachers and help them work better in teaching the subjects they handle. Teacher certification is expected to improve the quality of teachers and help them work better in teaching the subjects they handle. With certification, teachers have proof of their abilities and expertise in a particular field. This makes the teaching and learning process more effective because teachers are more confident and focused. In addition, certification can also motivate teachers to continue learning and developing themselves professionally.

3.2.2 The effectiveness of empowering educators through training, internships, and teacher competency certification with school industry partners in improving the quality of graduates.

Triastuti in Sabon, et al. (2020) states that the concept of learning quality contains five components, namely learning, suitability, efficiency, effectiveness, and productivity. Through collaboration with industry partners, schools can improve the quality of learning by ensuring that learning materials are relevant to the needs of the real world of work (link and match). Efficiency is also achieved through effective teaching methods employed by educators, as they directly apply learning materials to real-world situations. Thus, the learning process becomes effective because educators possess the necessary competencies to facilitate learning through practical application. Training, internships, and teacher competency certification are necessary because educators are a key factor in the success of education at schools, as teachers are central to and the source of teaching and learning activities (Daud, 2020). Therefore, training, internships, and certification are very important for teachers. If teachers have skills that align with the workplace, the material they teach will better suit students' needs. As a result, students will find it easier to understand and be better prepared to enter the workforce after graduation. Discussing and sharing experiences with experts can enhance understanding of proper work procedures, required skills, and adequate knowledge. This helps teachers avoid guessing how to teach competencies appropriately, enabling them to deliver material more effectively and produce good outcomes in the learning process (Devina et al., 2022).

In addition to improving teacher competencies, class standardization is also important to create a learning environment that supports real-world practices similar to those in the workplace. With grants for practical tools from the industry, students can directly learn to use the same equipment as in the workplace. This makes the learning process more productive because students not only learn theory but also become accustomed to real-world work situations. Classroom standardization can facilitate teachers in sharing their knowledge and providing hands-on experience to students. Standardization carried out by industry partners can take the form of establishing teaching factory workshops. The establishment of teaching factory workshops can enable teachers to apply more effective teaching methods aligned with industry needs, thereby enhancing students' technical skills to meet industry standards. This aligns with research by Rudiantna (2022) that Teaching Factory (TEFA) is a production-based learning approach that integrates the learning process with the workplace through production units in schools, aiming to strengthen the connection between education, industry, and the business world.

Collaboration between schools and industry partners can encourage improvements in the quality of learning through educators who meet industry standards, so that students achieve better results and schools have the opportunity to be recognized by the business world, which ultimately opens up wider employment opportunities for graduates. According to Rojaki et al. (2021), the purpose of collaboration between schools and the business and industrial sectors is to improve graduates' readiness to enter the workforce, which will ultimately enhance school quality and provide work experience that master standardized productive skills, internalize attitudes, values, and industry culture oriented toward quality, economic values, and entrepreneurial spirit, as well as fostering a critical, productive, and competitive work ethic. In line with Dewi et al. (2024), schools with teachers who have undergone industrial internships show a 30% increase in graduate absorption by industry. This indicates that the curriculum and skills taught are increasingly aligned with industry needs. Teachers' internship experiences also help students develop soft skills more effectively.

Schools should aim to produce graduates who are skilled, possess competencies in their respective fields, and have the ability to compete in the industrial world or engage in entrepreneurship (Dewi & Titisari, 2022). Improved graduate quality will attract industry partners to establish further collaborations, thereby increasing recruitment opportunities for students. This benefits students by enabling them to enter the workforce directly and strengthens the school's position as an educational institution producing job-ready graduates. Graduate quality is significantly influenced by teachers' ability to deliver content and guide students, making teacher competency enhancement a crucial step in producing job-ready workforce. In line with Sujianto et al. (2022), the quality of a teacher's work is shaped by their

mastery of the subject they teach, as this not only influences how teachers plan and conduct their professional lives within the school environment and broader society but also directly contributes to achieving high-quality school management standards.

Collaboration between schools and industry partners can yield several positive impacts, such as (Ningtias et al., 2025): a) students acquire skills aligned with industry standards, b) vocational teachers enhance their competencies through internships in industry and formal training, c) school facilities become more comprehensive and supportive of industry-based learning, and d) the TEFA (Teaching Factory) model runs effectively, producing marketable products. These impacts indicate that partnerships with industry not only strengthen the technical capabilities of students and teachers but also promote the creation of a more realistic and productive learning environment. This makes graduates better prepared for the workforce and adds value for schools in establishing sustainable collaborations with various industry partners. According to Subagio & Haryanto (2023), practical learning conducted by students through TEFA (Teaching Factory) involves producing goods or services that meet industry standards and community needs, where the products produced are tailored to students' competencies and determined in collaboration with industry partners or through school research. Empowering educators through industry partnerships is crucial because it directly impacts the development of students themselves. If empowerment of educators is not carried out, it will lead to high unemployment rates among vocational school graduates, as there is a mismatch between the school's output, which cannot meet the needs of the business and industrial sectors that are constantly evolving (Lesrati & Pardimin, 2019). The quality of education in a school can be seen from the ability of its graduates to compete and contribute in the workplace and society. In line with Maulidin et al. (2024), graduates are seen as the final result that reflects the quality of the school, so solid cooperation between teachers and principals is needed in implementing programs or curricula that support the learning process.

4. Conclusion

Based on the results of observations and interviews conducted, empowering educators through collaboration with industry partners (UT) is highly effective in improving the quality of graduates from SMK Muhammadiyah 7 Gondanglegi. The empowerment of educators carried out by UT includes training, internships, and teacher competency certification. The training conducted by UT enables educators to enhance their theoretical knowledge and understanding of the equipment and technology used in the workplace. The internships organized by UT are designed to help educators understand industry standards so they can align their teaching methods with those used in the workplace. The teacher competency certification conducted by UT provides educators with official recognition of their skills and competencies, helping to boost students' confidence when educators teach the material, and opening up opportunities for collaboration with industries to further improve the quality of school graduates. The new knowledge and technical skills aligned with industry standards enable educators to teach more effectively, resulting in high-quality students and a significant

number of graduates from Muhammadiyah 7 Gondanglegi Vocational School who are ready to enter the business and industrial sectors.

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