JPPIPA 11(1) (2025)

Jurnal Penelitian Pendidikan IPA

Journal of Research in Science Education

http://jppipa.unram.ac.id/index.php/jppipa/index

Evaluation of the One Heart Education Program in the Motorcycle Engineering and Business Expertise Competency

Nogi Handepi[1*], Wakhinuddin[1], Hasan Maksum[1], Arwizet K[1]

[1] Pendidikan Teknologi Kejuruan, Universitas Negeri Padang, Padang, Indonesia.

Received: July 27, 2024
Revised: November 19, 2024
Accepted: January 25, 2025
Published: January 31, 2025

Corresponding Author:
Nogi Handepi
nogihandepi@gmail.com

DOI: 10.29303/jppipa.v11i1.9772

© 2025 The Authors. This open access article is distributed under a (CC-BY License)

Abstract: Vocational education plays a critical role in preparing students to meet industry demands and enter the workforce effectively. This study aims to evaluate the One Heart Education Program in the Motorcycle Engineering and Business expertise competency at SMKN 1 Luak District, focusing on context, input, process, and product aspects, using the CIPP evaluation model. The study examines whether the program has been managed optimally. Employing a mixed-method approach, the research uses purposive sampling, involving 36 respondents, 26 for quantitative data and 10 as qualitative informants. Data collection methods include questionnaires and interviews. The evaluation results show that the program achieved an overall score of 72.24, categorized as sufficient, indicating suboptimal management. In detail, the context aspect related to program objectives is rated as poor, though the environmental aspect is good. The input, process, and product aspects are also found to be lacking. Key recommendations include optimizing the context aspect by refining program goals, adopting a centralized approach in the input aspect to explore students' potential, enhancing the learning process in the process aspect to better align with industrial standards, and improving outcomes in the product aspect. These improvements aim to enhance the overall effectiveness and impact of the One Heart Education Program.

Keywords: Evaluation; One heart education program; Motorcycle engineering and busines

Introduction

Education is an important component in developing quality human resources. To achieve this goal, program evaluation in education is very important as a tool to ensure that the education process runs according to plan and achieves the expected results (Arikunto, 2012). Evaluation plays an important role in understanding the effectiveness and efficiency of a program, especially in the context of vocational education which aims to prepare graduates to enter the workforce (Sapto Irawan & Prasetyo, 2020).

In the development of vocational education, evaluation models such as CIPP (Context, Input, Process, Product) are widely used because they provide a comprehensive framework for assessing program success(Husnaini et al., 2021). This model is very relevant for evaluating the implementation of competency-based curriculum, which is the basis of learning in vocational schools (Arifin, 2012).

In addition, the importance of evaluation in vocational education is reinforced by the need to ensure that the curriculum taught is aligned with industry demands (Derisman, 2011). For example, collaborative programs with industry such as the "One Heart Education Program" by PT Astra Honda Motor are designed to support the achievement of technical skills that are relevant to market needs (PT Astra Honda Motor, 2024a). Therefore, evaluation serves as a strategic

How to Cite:
Handepi, N., Wakhinuddin, Maksum, H., & K, A. (2025). Evaluation of the One Heart Education Program in the Motorcycle Engineering and Business Expertise Competency. *Jurnal Penelitian Pendidikan IPA*, *11*(1), 1173–1179. https://doi.org/10.29303/jppipa.v11i1.9772

step to measure the alignment between the curriculum, learning process, and industry requirements.

The development of the world of education, especially vocational education in Indonesia, has grown rapidly and faces increasingly complex challenges (Sudjana, 2005). Vocational education is one of the main components in the implementation of vocational education in Indonesia. Based on Law Number 20 of 2023 concerning the Education System, Article 15 states that vocational education is secondary education that aims to prepare students, especially to work in certain fields(Purnawirawan et al., 2020). Vocational High Schools (SMK) aim to produce graduates who are ready to enter the world of work, either as employees or entrepreneurs. To achieve this goal, cooperation is needed between SMK, the industrial world, and the business world(Kholis et al., 2020).

One collaboration worth noting is PT. Astra Honda Motor (AHM), a company engaged in the manufacturing, assembly, and distribution of Honda motorcycles. As the only Authorized Brand Holder Agent (ATPM) for Honda motorcycles in Indonesia, PT. AHM actively contributes to vocational education through the One Heart Education Program. This initiative is a form of the company's commitment to improving the quality of vocational education in Indonesia, in line with the principle of "Link and Match" between schools and industry. Until 2024, this program has been implemented in 710 partner vocational schools throughout Indonesia, which provides benefits such as the latest curriculum, teacher training, and access to modern equipment.

According to Markus Budiman Widihandojo, Director of PT. Astra Honda Motor and program supervisor, this initiative is a manifestation of the company's dedication to advancing vocational education throughout Indonesia. This program combines the Motorcycle Engineering and Business curriculum of Astra Honda Motor in partner vocational schools in various provinces. This program aims to produce young workers who are competitive and in accordance with industry needs and are able to become entrepreneurs who have a positive impact on society.

The comprehensive support of this program includes curriculum development, teaching materials, equipment and tool donation, teacher training and certification, student internships at AHASS (AHM's official workshop), and industry-based competency tests. In addition, PT. AHM provides an e-learning platform, industry visits, and guidance to ensure effective program implementation.

However, data from a graduate tracking study from 2021 to 2023 at SMKN 1 Luak District, a partner school in West Sumatra, revealed that only 14% of alumni work in their fields of expertise, with only 5% working at AHASS. This is surprising considering that 40% of alumni have competencies that have been certified by the industry from PT. AHM. In addition, interviews with teachers revealed a gap in knowledge updates among instructors, as only silver-certified teachers receive the latest technology updates, leaving bronze-certified teachers less able to deliver the curriculum effectively (Stufflebeam, 2007; Zhang et al., 2011).

Given these challenges, an evaluation of the One Heart Education Program at SMKN 1 Luak Regency is important. For the past eight years, the program has never undergone a formal review, despite the marked differences in its outcomes. As explained by Daryanto (2010), ongoing evaluation is essential to identify and address deficiencies in a program(Jon Areli et al., 2020). The purpose of this study is to evaluate the One Heart Education Program comprehensively using the CIPP (Context, Input, Process, Product) model(Rohaeni et al., 2021). This evaluation aims to identify the strengths and weaknesses of the program in aligning its objectives, resources, processes, and outcomes with the needs of students and industry demands. The findings are expected to provide actionable recommendations to enhance the effectiveness of the program and ensure its sustainability in preparing skilled graduates

This study uses the CIPP (Context, Input, Process, Product) evaluation model to comprehensively review the program. This model provides a systematic framework for assessing the design, implementation, and outcomes of the program, and provides actionable feedback for improvement (Wakhinuddin, 2008). Through this evaluation, this study aims to provide insight for PT. Astra Honda Motor and SMKN 1 Kabupaten Luak on whether the program should be continued, improved, or terminated. These findings will serve as a basis for improving the effectiveness of vocational education programs, ensuring that they are aligned with industry demands, and better preparing students for successful careers.

Method

This study employs an evaluation approach using the CIPP (Context, Input, Process, Product) model. This model views evaluation as a system that analyzes programs based on their components to assess the suitability between the specified standards and their actual implementation(Arikunto, 2010). The research method used is a mixed-method approach with a Concurrent Triangulation design, combining qualitative and quantitative approaches in a balanced manner(Sugiyono, 2012). Qualitative methods serve as the primary approach to examine program implementation across various evaluation components,

while quantitative methods are used as a secondary approach to analyze respondents' achievements in each evaluation component(Muslim et al., 2020). The research was conducted at SMKN 1 Luak District, Nagari Andaleh, Lima Puluh Kota Regency, from August to October 2024. The program evaluated was the "Satu Hati" education program in Motorcycle Engineering and Business Expertise. The evaluation components include program objectives and environment (context), human resources, especially students (input), learning implementation (process), and program results (product).

The flow of this research methodology is illustrated in Figure 1, which provides a clear depiction of the sequential steps and processes involved in conducting the study.

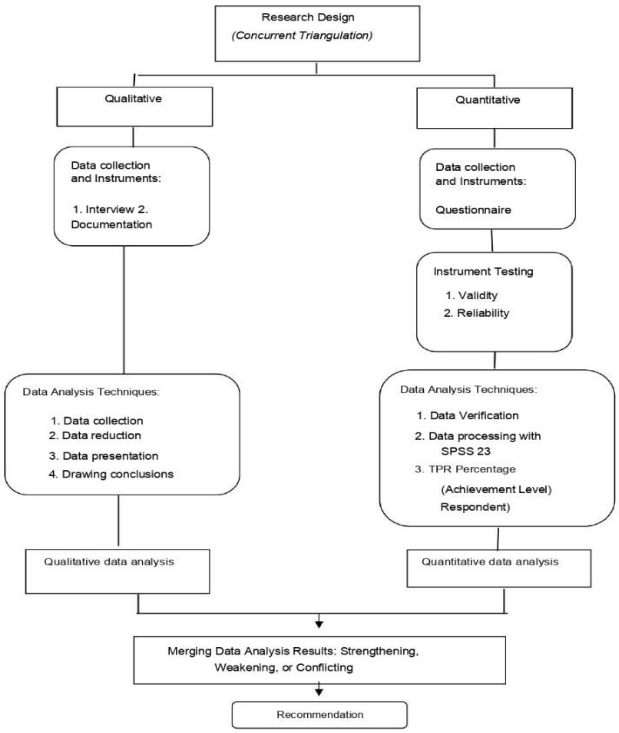

Figure 1. Research Flow Diagram

The data collection techniques consisted of questionnaires with a Likert scale for quantitative data and interviews, observations, and documentation for qualitative data. Quantitative data analysis was carried out through data tabulation, score calculation, and percentage analysis to measure the achievement of indicators. The analysis results were categorized based on a predefined percentage range to determine the level of respondents' achievement, as follows: 90-100% (Very Good), 80-89% (Good), 65-79% (Fair), 55-64% (Poor), and 0-54% (Very Poor). Qualitative data were analyzed using the Miles and Huberman model, which includes data reduction, data display, and conclusion drawing or verification. Data reduction involved summarizing, selecting key information, and focusing on relevant aspects to identify themes or patterns. The data display process organized the reduced data into a systematic narrative to facilitate understanding and decision-making. Finally, conclusions were drawn based on the reduced and displayed data, with opportunities for verification through further field testing to ensure accuracy and validity.

Research respondents included the total student population (38 individuals) and 10 key informants selected for qualitative data collection based on their involvement and knowledge of the program. This study aims to evaluate the effectiveness of the program using the CIPP model, provide actionable recommendations for improvement, and support the further development of industry collaboration programs in vocational education.

Results and Discussion

Results

Evaluation of the Satu Hati education program on Motorcycle Engineering and Business competencies at SMKN 1 Luak Regency using the Context, Input, Process, and Product (CIPP) evaluation model. The results of this evaluation provide recommendations to program implementers. Because the school manages the program, the school has the authority to make changes and improvements to increase the effectiveness of the program. The results of the study are presented in detail below, followed by a discussion. A summary of the evaluation results is shown in Table 1.

Table 1. One Heart Program Evaluation Results

Aspect	Indicator	Percentage (%)	Criteria
Context	Program objectives	67.5	Fair
	Program Environment	86.29	Good
Input	Human resources (students)	61.44	Poor
Process	Learning implementation	82.22	Good
Product	Evaluation of program outcomes	64.02	Poor

Context Evaluation

The context evaluation assesses the program environment, unmet needs, and population characteristics to determine what actions are necessary. The context analysis of the Satu Hati program included the evaluation of program objectives and the learning environment. The quantitative results for this aspect are presented in Table 2.

Table 2. Quantitative Results of Context Evaluation

Indicator	Percentage (%)	Criteria
Program objectives	67.5	Fair
Program Environment	86.29	Good

The program objectives achieved the criteria of "Fair" (67.5%), indicating alignment with SMKN 1's objectives but highlighting areas for improvement to better meet industry and student needs. In contrast, the program environment scored "Good" (86.29%), reflecting a conducive learning environment that supports students' objectives in Motorcycle Engineering and Business studies.

Qualitative data from interviews supported these findings. Industry representatives noted that despite the program being aligned with industry standards, many graduates remained unemployed or lacked motivation to pursue entrepreneurship, indicating a need for improvement in student alignment and engagement. School representatives highlighted that the teaching environment was conducive, with facilities reflecting industry standards. However, they emphasized the need to align program objectives with industry demands and student outcomes to ensure greater success. Alumni shared that the program provided a strong knowledge base but needed to improve relevance to better align with career needs and aspirations, ensuring students were better prepared for their future roles.

Input Evaluation

Input evaluation focuses on the readiness of human resources, especially students. The evaluation results are summarized in table.

Table 3. Input Evaluation Results

Indicator	Percentage (%)	Criteria
Human resources (students)	61.44	Poor

The "Poor" (61.44%) criterion reflects low motivation and participation among students. Interviews revealed that:

- Students were less aware of the long-term benefits of the program.
- Many considered the program irrelevant to their career aspirations.
- Fatigue and inadequate preparation hindered engagement.

Recommendations include increasing student awareness of the benefits of the program, providing motivational sessions, and ensuring that the methods are interactive and aligned with student needs.

Process Evaluation

Process evaluation in the CIPP model aims to assess how well a program is implemented based on a predetermined plan. This evaluation includes indicators such as learning planning, implementation, and assessment. This evaluation also serves to predict the results of program implementation and provide information to guide improvement decisions. Based on data analysis, the learning process scored 82.22%, which is classified as Good. This score indicates that the learning process, including planning, implementation, and assessment, has been implemented satisfactorily. However, there is still room for improvement to further optimize quality.

Table 4. Process Evaluation Results

Indicator	Percentage (%)	Criteria
Teaching Implementation	82.22	Good

Interview results support this assessment. Representatives from PT. Menara Agung stated that the teaching process is aligned with the PT. Astra Honda Motor curriculum. Teachers have adjusted their methods to meet the needs of the current generation, but low student interest and motivation remain major concerns. The vice principal emphasized that teaching complies with industry SOPs but requires continuous evaluation for program improvement. The head of the mechanical engineering program confirmed that the curriculum is delivered in accordance with PT. Astra Honda Motor standards but emphasized the need to increase student enthusiasm. Vocational teachers and alumni shared similar views, highlighting the need to increase student interest and motivation for the success of the program.

Product Evaluation

Product evaluation aims to measure and interpret program results to assess their achievement of objectives. In this study, product evaluation focused on assessing the results of the Satu Hati education program. The evaluation score was 64.02%, categorized as Poor. This indicates that the program has not fully achieved the desired objectives or standards. Several aspects, including planning, implementation, and participant understanding, need to be improved.

Table 5. Product Evaluation Results

Indicator	Percentage (%)	Criteria
Evaluation of One Heart Program Results	64.02	Poor

Interview results showed that the program is in line with the needs of the industry, especially PT. Astra

Honda Motor. However, low student interest and motivation hinder the main goal of workforce absorption. Representatives of PT. Menara Agung indicated that students who do not have a strong interest are generally not ready to work. The vice principal and head of the mechanical engineering program noted that although the teaching is in line with industry needs, student readiness to follow the program is still lacking. Vocational teachers suggested a more targeted approach to increase motivation, while alumni highlighted the importance of focusing on student dedication to the program.

Overall, the product evaluation results underscore the need for a comprehensive strategy to increase students' interest, motivation, and awareness of the Satu Hati program. Such efforts are essential to achieving the program's primary goal of preparing students to become competent industry professionals.

Discussion

Context Aspect

The purpose of the context aspect evaluation is to assess the extent to which the program meets the needs of the target audience, evaluate existing needs, and ensure that the program's objectives are in accordance with the context at hand (Lekok, R. 2024). Based on the study, the Satu Hati Education Program had a goal achievement rate of 67.5%, which was categorized as "Enough." This result indicates that participants' understanding and acceptance of the program's objectives are still not optimal. Several possible reasons for this include participants' lack of understanding of the urgency of the program, as well as ineffective communication in conveying the program's values and benefits to participants(Khairunisa, 2022).

The program environment was considered quite successful with a success rate of 86.29%, falling into the "Good" category. This supportive environment provides a conducive learning atmosphere, increases participant participation, and strengthens positive interactions between facilitators and participants. Indicators such as adequate facilities, a comfortable atmosphere, and active participant involvement are the keys to this success. However, there are still opportunities for further development by adjusting the learning environment based on the specific needs of participants and creating new innovations to support a more effective learning atmosphere(Vachruddin et al., 2023).

Overall, the program's success in creating a supportive environment, although the achievement of the objectives is still "Fair," shows great potential for development. Improved communication, providing more relevant educational materials, and evaluating delivery methods are strategic steps to improve the overall success of the program.

Input Aspect

Input evaluation is the ability of implementing an input evaluation program to provide an explanation of resources to meet the objectives of the program. Input evaluation provides information, regulates decisions, determines existing resources, alternatives taken and strategies to achieve goals (Netriwinda, 2022). The purpose of input evaluation is to provide input to meet the program objectives that are to be achieved properly (Junanto, et al., 2018).

Input evaluation aims to ensure that the resources used in the program are sufficient to achieve the stated objectives. Based on the study, human resource indicators, especially students, showed an achievement level of 61.44%, which is in the "Less" category. This low result is thought to be due to the lack of interest and motivation of students in the program, which may be influenced by the relevance of the material and the less interesting learning approach(Satriyanto, 2023).

Low student interest is often related to the inconsistency of the material with the students' personal needs or interests. When the material feels irrelevant, students tend to lose enthusiasm to participate. In addition, monotonous or less interactive learning methods can worsen this situation. Low motivation is also a major factor. If students feel that their efforts are not appreciated or the program does not have a direct impact on achieving their goals, their involvement in the program will decrease(Firmansyah et al., 2020).

To overcome these obstacles, improvements need to be made in program design, such as compiling materials that are relevant to students' interests and introducing more interactive and interesting learning methods. A reward system for active students and support from the surrounding environment, such as teachers and families, can help increase motivation. These steps are expected to increase student engagement so that the program can achieve more optimal results.

Process Aspect

The process aspect in the evaluation assesses how the program is implemented to achieve the stated objectives. Based on the research, the implementation of learning in the Satu Hati Education Program achieved an achievement level of 82.22%, which is categorized as "Good." This result shows that the methods and approaches used in the implementation of the program have been quite effective in many aspects, although there is still room for further improvement.

The success of this process can be seen from the high level of participant involvement in learning sessions, the use of varied learning methods, and

adequate facilitator competence. Positive interaction between participants and facilitators is the key to success in creating a dynamic and enjoyable learning atmosphere. In addition, the support of facilities and infrastructure, such as comfortable learning spaces and relevant learning media, also contributes to the success of the program (Shani, W., & Witasari, R. 2024).

However, to achieve more optimal results, further development is needed, such as creating more innovative learning methods, providing additional training for facilitators, and continuing to improve the quality of supporting facilities. With these steps, the implementation of learning is expected to have a more significant impact on program participants.

Product Aspect

Product evaluation is a tool for assessing a program that discusses the success of a program that is run in a structured manner. The purpose of this evaluation is to measure, analyze and assess a result. Based on the research results, the product indicator is the evaluation of the results of the one-hearted education program. Evaluation of learning outcomes emphasizes information about the extent to which the evaluation results achieved by students are in accordance with the objectives that have been set (Suardipa & Primayana, 2023).

Product evaluation assesses the success of the program based on the results achieved. Based on the study, the One Heart Education Program result indicator obtained a score of 64.02%, which is in the "Less" category. This result shows that although the curriculum and learning methods have been designed according to the needs of the industrial world, challenges are still found in ensuring that the expected results are achieved optimally.

The program curriculum has attempted to develop relevant skills, such as understanding of current technologies, teamwork, and application of materials that are in line with industry practices (Realitawati, R., et al. 2024). However, significant challenges are still found in the aspect of application of knowledge by participants. This may be due to the gap between theory and practice that students receive during the program. In addition, the lack of ongoing support after the program ends may also be a factor affecting the results (Fatawi, R. 2024).

To improve program outcomes, a more integrative approach is needed, such as increasing practicum activities, providing direct guidance related to the world of work, and creating a more comprehensive outcome evaluation. With these efforts, it is hoped that program outcome indicators can improve and provide a greater positive impact on participants.

Conclusion

The evaluation of the "One heart" education program using the CIPP model revealed strengths and areas for improvement across all components. The context component indicated alignment between program objectives and the educational goals of SMKN 1 Luak District, though refinements are needed to better meet industry demands. The input component highlighted the importance of enhancing student motivation and participation to achieve optimal outcomes. The process component demonstrated effective implementation, supported by adequate facilities and teaching methods, yet there remains room for further innovation. The product component underscored the need for increased focus on aligning program outcomes with industry standards and improving graduate readiness. These findings emphasize the need for strategic enhancements to ensure the program's effectiveness in preparing students for successful careers in the motorcycle engineering and business field.

Acknowledgments

The author's team would like to thank all parties who have helped carry out this research.

Author Contributions

This article was written by four authors, namely N.H, W, H.M and A.K. All authors carried out each stage together.

Funding

This research did not receive any external funding.

Conflicts of Interest

The author declares no conflict of interest.

References

Arifin, Z. (2012). Konsep dan Model Pengembangan Kurikulum. Remaja Rosdakarya Offset.

Arikunto, S. (2010). Evaluasi Program Pendidikan. Bumi Aksara.

Arikunto, S. (2012). Evaluasi Program Pendidikan. Bumi Aksara.

Derisman, A. (2011). Evaluasi Pelaksanaan Kurikulum Honda Menggunakan Model Cipp Pada Paket Keahlian Teknik Sepeda Motor di SMK Negeri 1 Lahat. 1(3).

Fatawi, R. (2024). Vis A Vis Kurikulum Merdeka Dengan Kebutuhan Dunia Kerja (Studi Kasus di SMK Al-Huda Kota Kediri). *Revorma: Jurnal Pendidikan dan Pemikiran*, *4*(2), 98-107.

Firmansyah, F., Rahayu, W., & Nurjannah, N. (2020). Evaluation of the entrepreneurship education program through extracurricular activities of

Student Company. *Jurnal Penelitian Dan Evaluasi Pendidikan*, *24*(1), 51–61. https://doi.org/10.21831/pep.v24i1.19783

Husnaini, A. N., Santosa, B., & Kuat, T. (2021). The implementation evaluation of school-industry cooperation to strengthen the vocational school students' competence. *International Journal on Education Insight*, *1*(2), 77. https://doi.org/10.12928/ijei.v1i1.2087

Jon Areli, A., Lian, B., & Kristiawan, M. (2020). An Evaluation of Implementation Industrial Work Practice Programs in Vocational School. *International Journal of Progressive Sciences and Technologies (IJPSAT)*, *20*(2), 179–186. https://www.researchgate.net/publication/342870679

Junanto, S., & Kusna, N. A. A. (2018). Process, and Product (CIPP).

Khairunisa, P. (2022). Evaluasi Program Sertifikasi Kompetensi Kerja Keahlian OTKP SMK Negeri 45 Jakarta. *Jurnal Pendidikan Indonesia*, *3*(08), 740–747. https://doi.org/10.36418/japendi.v3i08.1111

Kholis, N., Kartowagiran, B., & Mardapi, D. (2020). Development and validation of an instrument to measure a performance of vocational high school. *European Journal of Educational Research*, *9*(3), 955–966. https://doi.org/10.12973/EU-JER.9.3.955

Lekok, R. (2024). *Implementasi program sekolah ramah anak dalam menciptakan suasana pembelajaran yang kondusif di sdit baitul jannah bandar lampung* (Doctoral dissertation, Uin Raden Intan Lampung).

Muslim, M., Ambiyar, A., Setiawan, D., & Putra, R. (2020). Developing project-based learning tools for light vehicle engine maintenance subjects at vocational high school. *Jurnal Pendidikan Vokasi*, *10*(1), 22–33. https://doi.org/10.21831/jpv.v10i1.29564

Netriwinda, N., Yaswinda, Y., & Movitaria, M. A. (2022). Evaluasi Program Pendidikan Paud Holistik Integratif Dengan Model Cipp Di Nagari Pandam Gadang Kecamatan Gunuang Omeh. *Jurnal Inovasi Penelitian*, *2*(8), 2343-2352.

PT. Astra Honda Motor. (2024a, Juli 7). Pogram Edukasi Satu Hati. https://edukasi.satuhati.id/#/article/home.

PT. Astra Honda Motor. (2024b, Juli 7). Program Edukasi Satu Hati. https://edukasi.satuhati.id/#/article/home

Purnawirawan, O., Chintya, P. P., & Sholihah, M. (2020). *The Application of CIPPO Evaluation Model in Evaluating the Performance of School for Producing Entrepreneurs Programs in Vocational High School*. *443*(Iset 2019), 387–391. https://doi.org/10.2991/assehr.k.200620.075

Realitawati, R., Ikrom, F. D., Herawan, E., & Kadarsah, D. (2024). Penerapan 4c skills dalam pembelajaran abad 21 di sekolah dasar. *Muallimuna: Jurnal Madrasah Ibtidaiyah*, *10*(1), 22-32.

Rohaeni, E., Trisnamansyah, S., Wasliman, I., & Sauri, S. (2021). Implementation of Teaching Factory in Improving the Competence of Vocational High School Students (SMK). *Journal of Social Science*, *2*(5), 598–609. https://doi.org/10.46799/jss.v2i5.220

Sapto Irawan, & Prasetyo, D. (2020). the Evaluation of Online School Examination. *The Evaluation Of Online School Examination Implementation Using Cipp Model Sapto*, *24*(2), 136–145.

Satriyanto, K. (2023). Analysis of the Implementation of the Independent Curriculum At Vocational High Schools (Smk) Centers of Excellence. *Journal of Social Research*, *2*(10), 3786–3792. https://doi.org/10.55324/josr.v2i10.1468

Shani, W., & Witasari, R. (2024). Pendampingan Pembelajaran Materi Aqidah Akhlak Berbasis ICT Pada Siswa di SDN 1 Sukorejo. *Social Science Academic*, 59-70

Stufflebeam, D. & S. (2007). Evaluation Theory, Models, and Applications. A Wiley Imprint.

Suardipa, I. P., & Primayana, K. H. (2023). Peran desain evaluasi pembelajaran untuk meningkatkan kualitas pembelajaran. *Widyacarya: Jurnal Pendidikan, Agama Dan Budaya*, *4*(2), 88–100.

Sudjana, N. (2005). Evaluasi Program Pendidikan. Tarsito.

Sugiyono. (2014). Metode Penelitian Manajemen. Alfabeta.

Sugiyono. (2012). *Metode Penelitian Kuantitatif, Kualitatif, dan R & D*. Alfabeta.

Vachruddin, V. P., Susanto, B. A., Karim, A. R., Kusaeri, K., & Aditomo, A. (2023). Industrial-based competency and expertise assessment: study of management assessments at SMK center of excellence and vocational education and training (vet). *Jurnal Pendidikan Teknologi Dan Kejuruan*, *29*(2), 208–229. https://doi.org/10.21831/jptk.v29i2.63801

Wakhinuddin, S. (2008). Evaluasi Program. UNP Press.