
Jurnal Penelitian Pendidikan

<https://journal.unnes.ac.id/journals/JPP>

Evaluation of Deep Learning in Textile Products Subjects at SMK Ibu Kartini Semarang

Alfitri Gita Handayani*, Wulansari Prasetyaningtyas

Universitas Negeri Semarang, Indonesia

*Corresponding Author: gitahandayani@students.unnes.ac.id

Abstract

This study aims to evaluate the quality of learning in the Fashion expertise program using the CIPP (Context, Input, Process, and Product) model as a comprehensive approach to evaluate deep learning comprehensively on discharge materials in textile product subjects. This study uses an evaluative method with instruments in the form of questionnaires, observation sheets, and document analysis. The research instrument was declared valid based on the content validity test using the Aiken's V coefficient with a value above the minimum limit of 0.77 and reliability based on the Alpha Cronbach test with a reliability coefficient in the range of 0.70–1.00. The results of the evaluation of discharge technique learning using the weighted CIPP model showed that the context dimension obtained an achievement of 22.75%, the input dimension of 19.49%, the process dimension of 22.38%, and the product dimension of 21.54%. These findings show that discharge technique learning has been carried out effectively and relatively evenly in all evaluation dimensions, although there is still a need to strengthen the aspects of conscious learning, the completeness of supporting facilities, and the use of real media to improve the quality of vocational learning in a sustainable manner.

Keywords: textile products, discharge, deep learning, CIPP

INTRODUCTION

Vocational education has a strategic function in building human resources who are skilled, professional, and able to answer the needs of the industrial world and the world of work (DUDI). Akbar et al. (2024) In his research, it is emphasized that Vocational High School (SMK) graduates have a strategic role in preparing quality and competitive human resources in the world of work, so that SMK is expected to be able to produce graduates who not only have technical skills, but also adaptive competencies to changes in the industrial world and the global economy. Vocational schools have a strategic role in preparing human resources that are able to compete in the era of the industrial revolution 4.0 and Society 5.0 Through practice-based learning, curriculum relevant to industry needs, and strengthening technical and digital competencies, vocational schools help form graduates who are adaptive to technological developments and the dynamics of modern industrial change (Febrian, 2024; Hastutiningsih et al., 2024). Reality on the ground says that although vocational schools are expected to produce job-ready graduates, challenges such as teaching quality and curriculum relevance to industry needs show that not all vocational schools are successful in translating vocational visions into meaningful and adaptive learning practices (Aryawan, 2023).

The Merdeka Curriculum as a national policy was developed to address these problems through a more flexible, contextual, and student-centered approach (Anwar et al., 2025). The Merdeka Curriculum encourages experiential learning, reflection, and authentic projects that allow students to build knowledge through hands-on experience. One of the main characteristics of the Independent Curriculum is differentiated learning that adjusts students' styles, interests, and learning readiness. Differentiated

learning is a systematic approach in designing curriculum and instruction to meet the diversity of students academically, by accommodating the differences in readiness, interests, and learning profiles of each student so that each student can achieve their maximum learning potential (Tomlinson & Strickland, 2005). Another study states that differentiated learning is a teaching approach designed to respond to the diverse learning needs of students in a classroom, this approach helps teachers adjust time, resources, and teaching strategies to meet students' different backgrounds, readiness, skill levels, and interests, so that each individual student can access a quality curriculum and have a meaningful and thriving learning experience well (Tomlinson, 2014). Differentiated learning is designed to accommodate a diversity of interests, learning styles that suit their needs (Raisah et al., 2024). The implementation of the Independent Curriculum in its implementation still faces obstacles, especially in terms of integration between subjects, pedagogical consistency, and teachers' ability to facilitate the reflection process of students. Kusumaningrum et al. (2024) stated that most vocational school teachers are still focused on completing projects without providing enough space for students to evaluate their thinking processes and work results. In response to these challenges, the government through Regulation of the Minister of Primary and Secondary Education Number 13 of 2025 (Permendikdasmen No. 13/2025) has set a new policy direction that emphasizes that deep learning is the main strategy in the national education system.

Deep learning is a refinement of the previous policy, not as a replacement for the Independent Curriculum, and emphasizes the process of conceptual understanding, critical thinking, reflectiveness, and contextual learning in every learning activity (Kemendikdasmen, 2025). Based on Permendikdasmen No.10/2025, this policy is in line with the eight dimensions of the graduate profile which include: Faith and Piety towards God Almighty, Citizenship, Critical Reasoning, Creativity, Collaboration, Independence, Health, and Communication. Deep learning It is understood as an educational paradigm that prioritizes deep, reflective, and meaningful learning (Meaningful), as well as the aspect of conscious learning (Mindful) and fun (Joyful) is not just a memorization to build conceptual understanding and real application of knowledge (Nurdiana, 2024). In addition, learning strategies are based on Deep Learning Designed to encourage learners to actively participate, think critically, collaborate, and communicate effectively in a meaningful and contextual process of understanding (Hasanah et al., 2025).

SMK Ibu Kartini Semarang is one of the schools that has implemented deep learning as an approach in teaching and learning activities, which previously applied a differentiated learning model. The application of deep learning is directed to strengthen active student involvement, build meaningful conceptual understanding, and encourage a reflection process in learning, especially in vocational learning. The curriculum structure at SMK Ibu Kartini Semarang includes general subjects, vocational (productive) subjects, and elective subjects. General subject lessons play a role in building basic competencies and students' character, while productive subjects are focused on mastering skill competencies according to the vocational field. The elective subjects are designed to provide space to strengthen students' specific interests, talents, and competencies through deep learning that emphasizes meaningful and contextual learning experiences.

In the fashion skills program, the productive subjects in phase E (class X) of students are focused on understanding basic fashion concepts, basic sewing techniques, basic patterns, and understanding material characteristics. Approach deep learning applied through exploratory activities so that students can build meaningful basic knowledge before entering the stages of critical thinking, reflection, and concept integration (Liu & Qiao, 2025). This approach is important because the exploratory skills in the initial phase will be the foundation for students to understand the creative and technical process more deeply in the later phases. Meanwhile, in the productive subjects of phase F (grades XI and XII) learning is directed to mastering design elements, textile techniques, fashion production, and integrative collection preparation. Based on Learning Outcomes BKSAP (2022), there are seven main elements that must be mastered, namely Fashion Drawings, Technical Drawings, Design Style and Development, Textile Experiments and Decorative Design, Preparation for Fashion Making, Sewing Fashion Products, and Preparation of Fashion Collections. Research Sayekti et al. (2024) emphasized that the competencies of design, textile management, and fashion production in vocational schools must support each other so that students are able to meet industry guidance fashion which is increasingly complex.

Based on the results of field observations and interviews with the Coordinator of the Fashion Expertise Program, it was explained that in addition to general and productive subjects that include these

seven elements, SMK Ibu Kartini Semarang also determined an elective subject, namely textile products as a compulsory elective subject, based on an agreement between the deputy head of curriculum and the teacher of the Fashion Expertise Program through a decree numbered 429/268/JMK.YIK/XII/2025. This subject is integrated as an elective subject in order to align industry needs with curriculum flexibility policies, in accordance with the direction of vocational competency development. The subject of textile products plays a strategic role as a foundation in the process of material exploration, and experimental design oriented towards strengthening creativity, innovative capacity, and thinking skills. Through these activities, these elective subjects play an important role in shaping students' problem solving, critical thinking, thoroughness, and creativity skills.

In the optional subject of Textile Products, the material studied previously was decoupage, which focuses on decorative techniques on the surface of the fabric. However, based on the implementation of learning in these materials, the learning approach applied does not fully reflect the principles of deep learning, especially in the aspects of students' reflective engagement, strengthening learning awareness, and developing conceptual understanding that is integrated with practice. So, in the next material, evaluative efforts are needed to assess and strengthen the implementation of deep learning more optimally. In the context of this research, the focus is directed on discharge material in the subject of textile product selection which is the next material after decoupage, which is the technique of color removal in fabrics through chemical processes to produce new motifs that are contrasting and aesthetic. Mastery of discharge techniques requires students to explore the characteristics of textile materials, chemical reactions, discoloration mechanisms, chemical composition, and motif application techniques appropriately. Ideally, the discharge material becomes a forum for students to develop analytical, experimental, reflective, and metacognitive skills, where students not only perform procedures, but understand the meaning behind the process.

Field findings indicate that the implementation of the approach Deep Learning on material learning Discharge still in the transition stage of the model Project-Based Learning (PjBL) that differentiate towards a deep learning approach. This indication can be seen from the results of observations from September to October 2025, which shows that the implementation of learning is still focused on achieving product birth outcomes. Meanwhile, the process of meaning, alternative exploration, analytical discussion, and student reflection has not gained emphasis in learning practice. The assessment given by teachers also still focuses on physical results rather than students' thinking processes, collaboration, or innovation. This condition shows that there is a gap between policy and implementation of deep learning in the subject of textile products at SMK Ibu Kartini Semarang. Thus, a comprehensive evaluation is needed to assess the suitability of the context (Context), the readiness of the students (Input), implementation of learning (Process), and learning outcomes (Product). The CIPP model was chosen because it offers a holistic and proven evaluation framework in the analysis of vocational oriented education programs (Firdaus & Anriani, 2022).

The CIPP model is an evaluation framework designed to provide systematic and comprehensive information to support decision-making in the development of educational programs, this approach not only assesses the ultimate success, but also assesses the relevance, efficiency, and effectiveness of every aspect of learning and program operations (Stufflebeam & Zhang, 2017). The CIPP evaluation model developed by Daniel Stufflebeam is a comprehensive approach that not only focuses on the final outcomes, but also examines the various factors that contribute to the success of the program from the planning stage to the implementation process (Azman & Saputra, 2025). This model is oriented towards program improvement through a thorough analysis of the program's background (Context), resource readiness (Input), implementation of activities (Process), and results (Product). Various studies confirm that CIPP has high flexibility and is suitable for use in vocational education evaluation. Context is a dimension that evaluates the program background, needs, objectives, and suitability of program policies with real conditions (Sulkifli et al., 2024). Input assess the readiness of resources such as students, teachers, facilities, and instructional readiness as the foundation of program success (Santosa et al., 2023; Suri & Hariyati, 2024). Process evaluate the implementation of the program, the effectiveness of learning activities, teacher-student interaction, and the implementation of learning (Rurisman et al., 2023). And, Product assess learning outcomes, product quality, and program impact on students (Endang Suparman, 2019; Wahdan Wilsa et al., 2023).

Research Utomo & Prayitno, (2025) entitled Strategies and Development of the Deep Learning Approach in Vocational High Schools (SMK) in Indonesia only highlighting implementation strategies and challenges deep learning in vocational schools without touching a comprehensive evaluation of its implementation in certain areas of expertise. Other research by Wulandari et al. (2025) In the article Evaluation of Vocational Education in the Era of Industrial Revolution 4.0 and Society 5.0 also uses the CIPP model to examine the implementation of vocational education, but the study is macro and does not highlight one specific product element such as textiles and clothing. In addition, research by Akhadi & Shofwan, (2024) with title Evaluation of the CIPP Model of the Sewing Training Program emphasized that using the same evaluation model, namely the CIPP evaluation model, but applied to sewing training programs, not in the context of learning deep learning at SMK. This distinguishes this study because it seeks to connect the CIPP evaluation model with the learning approach deep learning which emphasizes the dimensions of high-level thinking, collaboration, and reflection. This approach is also in line with the eight dimensions of the profile of vocational education graduates that demand a balance between technical skills and the character of students who are adaptive to industrial developments.

Novelty of this study lies in its focus on learning evaluation deep learning on the material discharge in the optional subject Textile Products uses the CIPP model. From an academic point of view, previous research has not touched much on this specific area. Research by Ardiansyah & Nugraha (2025) emphasized that the management of attendance data, achievement and learning patterns can strengthen pedagogical decision-making. Research Yusuf & Basrowi (2023) shows that the success of the program is largely determined by the suitability of the industry context and the achievement of students' skills, while teacher readiness and the guidance process still need to be improved. Research Sari & Setiawan (2023) shows aspects of context and inputs such as school policies and the competence of BK teachers and is the main factor in the success of counseling services in vocational schools. Despite the different fields, this study proves the flexibility of the CIPP model for evaluating non-academic programs. Suwandi et al., 2024 Researching deep learning in primary-secondary education, while Apoko et al., 2025 Examine students' perceptions of deep learning without program evaluation. This research fills a scientific gap regarding how the context, inputs, processes, and products of textile learning are integrated in policy deep learning, as well as how this learning can be refined to answer the demands of the textile creative industry and fashion.

METHOD

This study uses evaluative research by applying the CIPP model as the main analytical framework. This design was chosen because it is in accordance with the research needs to comprehensively describe the implementation of deep learning in the subject of textile products at SMK Ibu Kartini Semarang, especially in discharge materials which are an important part of the textile experiment phase F.

Table 1. Instrument Table

CIPP Dimensions	Instruments	Data Source	Number of Items
<i>Context</i>	Deep Learning Plan (DLP) document analysis sheet	DLP Documents	11 items
	Student Motivation Observation Sheet	18 students of grade XI	10 items
<i>Input</i>	Student Self-Perception Questionnaire Sheet on Learning Motivation	18 students of grade XI	10 items
	Supporting Facilities Observation Sheet	Practice Laboratory	8 items
<i>Process</i>	Observation sheet for the implementation of Deep Learning (<i>Deep Learning</i>)	18 students of grade XI	15 items
	Observation sheet for the implementation of Deep Learning (<i>Deep Learning</i>)	Teachers who teach subjects of textile products	15 items
<i>Product</i>	Learning Outcome Assessment Document	Competency score of 18 students of grade XI	-

Before the research instrument is used in data collection, testing is carried out first to ensure the

level of validity and consistency of the measurement results produced. The validity of the instrument is related to the extent to which the theoretical basis and empirical evidence support the accuracy of the interpretation of the score obtained in accordance with the purpose of using the instrument. The validity of the questionnaire instrument and observation sheet in this study was tested through the validity of the construct using the coefficient of Aiken's V. The Aiken's V formula is used to assess the validity of the content of the instrument based on the assessment of experts, who assess each item of the instrument related to its suitability in representing the measured construct. The assessment involves a number of expert validators (n) who score each item, then the results are analyzed to determine the feasibility of the instrument before it is used at the research data collection stage. Aiken's formula V, is:

$$V = \Sigma S / [n(C-1)]$$

(Adhi Kusumastuti et al., 2020; Aiken, 1985)

Description:

- V = Aiken validity index
- S = score obtained from the assessment results (r – lo)
- lo = lowest score on the validity rating scale
- C = highest score on the validity rating scale
- n = number of assessors (expert validators)
- r = the score given by the assessor to an item of the instrument

The results of the analysis of each instrument item are declared valid if they meet the limit value of the Aiken's coefficient V that has been set. The validity of the instrument in this study was tested by six expert assessors using a six-level assessment scale. Based on the reference of Aiken's V table, the minimum limit of validity coefficient that must be met by each instrument item is 0.77 with a probability level of 0.36 (Aiken, 1985; Roebianto et al., 2023). The results of the calculation showed that as many as 69 statements from 6 instruments used obtained ≥ 0.77 . Thus, the six instruments developed were declared to have adequate content validity and were suitable for use as a data collection tool in this study. A summary of the results of the content validity test using Aiken's V formula is presented in Table 2.

Table 2. Result of Validity

Instrument Type	V Aiken's	V Count	Criteria
DLP document analysis sheet	0.77	≥ 0.87	Valid
Student Motivation Observation Sheet	0.77	≥ 0.83	Valid
Student Self-Perception Questionnaire Sheet on Learning Motivation	0.77	≥ 0.93	Valid
Supporting Facilities Observation Sheet	0.77	≥ 0.90	Valid
Observation sheet for the implementation of Deep Learning (<i>Deep Learning</i>)	0.77	≥ 0.90	Valid
Observation sheet for the implementation of Deep Learning (<i>Deep Learning</i>)	0.77	≥ 0.87	Valid

The reliability of this research instrument was calculated using the Alpha Cronbach coefficient with the help of SPSS software version 25. The results of instrument reliability data processing are presented in a concise manner in Table 3. Cronbach's Alpha formula is as follows.

$$\alpha = \frac{n}{n-1} \left(1 - \frac{\sum S_i^2}{S_x^2} \right)$$

(Cronbach, 1951)

Description:

- α = instrument reliability coefficient
- n = total instrument number
- $\sum S_i^2$ = the sum of the variance of each instrument item
- S_x^2 = the total score variant of the instrument

Based on the results of the analysis, the instrument used to evaluate deep learning in the subject of Textile Products at SMK Ibu Kartini Semarang showed a very good level of reliability, with a coefficient value in the range of 0.70 to 1.00 (Prasetyaningtyas et al., 2023, 2025; Prasetyaningtyas & Wening, 2022; Ritter, 2010). Thus, it can be concluded that the assessment instrument developed has adequate internal consistency and is suitable for use as an evaluation tool for deep learning in the subject of Textile Products at SMK Ibu Kartini Semarang.

Table 3. Result of Reliability Estimation

Instrument Type	Cronbach's alpha
DLP document analysis sheet	0.941
Student Motivation Observation Sheet	0.869
Student Self-Perception Questionnaire Sheet on Learning Motivation	0.860
Supporting Facilities Observation Sheet	0.712
Observation sheet for the implementation of Deep Learning (<i>Deep Learning</i>)	0.923
Observation sheet for the implementation of Deep Learning (<i>Deep Learning</i>)	0.759

The data in this study was analyzed using quantitative and qualitative descriptive analysis techniques in accordance with the CIPP evaluation model. Quantitative data was obtained from the results of questionnaires and observation sheets which were analyzed by calculating the score, frequency, and percentage of achievement of each indicator. The answer scores on the instruments and observations were converted into a percentage form to determine the categories of evaluation results. Meanwhile, qualitative data was obtained through document analysis, including the Deep Learning Plan (DLP) and student learning outcome assessment documents. Document analysis is carried out by matching the content of the document with the indicators on the evaluation instrument to assess the suitability of planning, assessment implementation, and learning outcomes. The results of quantitative and qualitative analysis are then interpreted in a systematic manner to provide a comprehensive picture of the quality of learning based on the dimensions of context, input, process, and product.

RESULT AND DISCUSSION

Results of learning evaluation discharge technique in the subject of textile products at SMK Ibu Kartini Semarang was analyzed using the CIPP model which includes Context, Input, Process, and Product. According to Stufflebeam & Coryn (2014) The CIPP model views evaluation as an ongoing effort that includes context analysis to establish needs and objectives, input evaluation to assess strategies and resources, process evaluation to monitor program implementation, and product evaluation to assess program outcomes and impact overall. This evaluation aims to obtain a comprehensive picture of the suitability of planning, resource readiness, learning implementation, and student learning outcomes in the framework of deep learning.

Table 4. Table of Results

CIPP Dimensions	Instruments	Results
Context	DLP document analysis sheet	22,75%
	Student Motivation Observation Sheet	5,83%
Input	Student Self-Perception Questionnaire Sheet on Learning Motivation	7,41%
	Supporting Facilities Observation Sheet	6,25%
Process	Observation sheet for the implementation of Deep Learning (Deep Learning)	10,88%
	Observation sheet for the implementation of Deep Learning (Deep Learning)	11,5%
Product	Learning Outcome Assessment Document	21,54%

Context

The results of the evaluation on the context dimension show that the learning planning contained in the Deep Learning Plan (DLP) as a whole is in the very good category. These findings indicate that the DLP has been systematically compiled and has strong planning components, including document identity, objectives aligned with learning outcomes, and assessment planning and relevant learning resources. Learning planning is a systematic process that includes the formulation of clear objectives, the selection of teaching materials, the right methods, and the planning of relevant assessments to achieve optimal learning outcomes (Ammar et al., 2024). The results of document analysis related to the aspect of deep learning are conscious (mindful learning), shows inappropriate results. This is because the learning carried out does not fully reflect activities that encourage student learning awareness, such as self-reflection, setting learning strategies independently, or strengthening self-regulated learning. Although DLP has included the principles of deep learning conceptually, the implementation of the conscious aspect in learning practice still needs to be strengthened.

Mindful learning Placing a focus on students' awareness of the learning process so that they can manage learning strategies, reflect, and be cognitively actively involved in learning (Azzahra & Jaya, 2025). In addition, mindful learning play an important role in increasing learning awareness and student engagement in a better learning process because students can organize and evaluate their own learning strategies (Self-Regulated Learning) on critical thinking skills and learning outcomes (Mahrufah & Rijanto, 2024). When this aspect has not been implemented properly, learning tends to still focus on completing practical activities, not fully on developing student awareness. These findings are in line with the view Stufflebeam & Zhang (2017) which confirms that the context evaluation in the CIPP model not only assesses the completeness of the planning documents, but also its suitability with the needs and learning objectives to be achieved. Although the context value shows high results, the presence of items that are not optimal is an important indicator for improving planning and strengthening the implementation of deep learning, especially in the aspect of awareness.

The results of the evaluation of the context dimension show that DLP has become a strong foundation for the implementation of discharge technique learning, but adjustments and reinforcement are still needed in the planning of activities that explicitly encourage reflection and awareness of student learning so that the implementation of deep learning can run well.

Input

The results of the evaluation on the input dimension showed that the initial readiness of learning discharge technique judging from student motivation, student self-perception, and supporting facilities are in the good to very good category. The results of the observation of student motivation showed that in general students had sufficient motivation to participate in practical learning, although there were several items with relatively lower achievements, namely enthusiasm for participating in learning from beginning to end, confidence in producing the best product, and a sense of pleasure and enthusiasm during practice in the laboratory. Students' motivation to learn in practical learning is greatly influenced by the experience of initial success and a pleasant learning atmosphere, because a conducive learning environment is able to increase intrinsic motivation, active involvement, and student participation in the learning process (Damayanti & Rosyidah, 2025; Kusmawati et al., 2025; Sutrina et al., 2025). These findings indicate that although students are engaged in learning, consistent levels of enthusiasm and confidence have not been

fully formed in all students. This condition can be attributed to the characteristics of vocational practical learning that require precision, patience, and mental readiness in the face of possible experimental failure.

The results of the analysis of the student self-perception questionnaire on learning motivation showed that in general, students reported strong learning motivation during the learning process discharge technique, which is reflected in the high achievement in most instrument items. However, the item "I am motivated to work with the group in producing good experiments" showed relatively lower achievement compared to other items, indicating that the collaborative experience was not fully felt by all students. Self-perception and intrinsic motivation are closely related to students' subjective experiences during learning and can affect engagement and learning outcomes. Learning motivation as a psychological construct plays an important role in engagement and achievement of learning achievement, meta-analysis research shows that intrinsic motivation, i.e. the motivation from within students to carry out learning activities, is positively correlated with perseverance, active engagement, and student achievement in various learning contexts (Howard et al., 2021). The difference between the results of observation and the student's self-perception shows that the internal motivation of the students is relatively high, although it has not been fully reflected consistently in the behaviors observed during the learning process.

Observation results of practical learning support facilities discharge shows that most of the main tools of practice are in place, although there are still some aspects that need improvement. The availability of gloves and masks is not enough to be used simultaneously by all students, thus potentially reducing the comfort and safety of the practice, especially in the use of chemicals. These findings are in line with research that confirms that adequate practicum facilities are an important factor in creating a safe and effective learning environment in vocational schools and affect the quality of practice implementation (Handayani et al., 2024). In addition, the unavailability of a portfolio of works from the previous year physically limits students' access to linking the practice carried out to the expected competency standards. The limitations of these facilities have the potential to affect student engagement and performance, because the completeness of facilities and infrastructure has been proven to contribute to the satisfaction and quality of learning outcomes in vocational education (Ernawati et al., 2025; Handayani et al., 2024).

Process

Evaluation results on dimensions process shows that the implementation of technical learning discharge has been actively taking place and reflects the principles of active learning that encourage student engagement in various stages of practice. Observations of student learning engagement reveal that students actively observe demonstrations, discuss with peers, apply concepts in practice, and evaluate their cognitive and affective engagement, which is in line with findings in vocational research that emphasize that student engagement is an important component of an effective learning process because it can improve students' understanding and performance (Indramayanti et al., 2024)

The evaluation of the teacher's role shows that students generally feel that the teacher has played the role of an effective facilitator of learning, where the teacher not only delivers technical instruction but also guides the student to think critically and provide relevant feedback, in accordance with the literature that shows the role of the teacher in creating learning engagement through appropriate teaching strategies and the creation of a supportive learning environment (Fitrianti & Hidayati, 2025). However, there is one aspect that needs to be considered, namely the limitations in providing examples of physical products as learning media, because in its implementation students only see processes and results through visual media such as videos. This limitation can reduce the depth of a student's learning experience, as the use of real-life examples in the context of vocational practice can strengthen the connection between theoretical concepts and real-life experiences, and help students relate the process to the final outcome more meaningfully (Micallef & Newton, 2024). Although overall learning facilitation has reflected the implementation of practices that support active learning and student engagement, the provision of examples of real products or portfolios of work can be an important strategy in enhancing the meaning of learning and encourage deeper engagement between concepts, processes, and practical learning outcomes.

Product

The results of the evaluation on the product dimension show that the achievement of student learning outcomes in learning discharge technique in the subject of Textile Products in general is in the

good category. The analysis of the assessment document shows that students have been able to master the practical competencies assessed, including technical skills, visual processing, and the ability to document practical results. These findings indicate that the practical learning carried out has been effective in developing students' vocational competencies as a whole. Approach Project-Based Learning (PjBL) in vocational education is able to improve students' technical skills and other skills needed by the industrial world, so that structured practical learning can produce meaningful vocational competency achievements (Fitri et al., 2025). Judging from the assessment aspect, the achievement in the motive aspect shows the most prominent results compared to other aspects. This shows that students are able to explore visual ideas and develop motifs discharge creatively, so that it not only follows the working procedure, but also displays aesthetic elements in the products produced. This condition is in line with the characteristics of vocational learning in the textile sector which emphasizes the balance between technical skills and creativity as part of work competencies (Afidah & Evawati, 2025). Meanwhile, in the technical aspects and the preparation of practice reports, there is still room for strengthening. Some students need further assistance in maintaining the accuracy of work procedures and in compiling reports that are able to reflect the process and results of practice in a systematic manner. This is in line with the view that product assessment in vocational learning assesses not only the final outcome, but also the work process and reflective abilities of students as part of deep learning (Karim & Indra, 2025).

The results of the evaluation with the CIPP model show that the learning of discharge technique in the subject of textile products at SMK Ibu Kartini Semarang has been carried out well from the transition period of differentiated learning to deep learning (*Deep Learning*). (Stufflebeam & Coryn, 2014) emphasizing that the main objective of the evaluation is not only to prove the success of the program, but rather to provide useful information to improve the planning, implementation, and results of the program in the future. Suitability of learning planning, high student motivation, implementation of learning that is in line with the principles deep learning, as well as the achievement of good learning outcomes show that practical learning based on textile experiments has great potential in improving the quality of vocational learning.

CONCLUSION

Based on the results of the evaluation of discharge technique learning using the CIPP model, learning at SMK Ibu Kartini Semarang is generally in the good to very good category. The overall evaluation results showed 86.18% with the achievement of the context dimension of 22.75%, the input dimension of 19.49%, the process dimension of 22.38%, and the product dimension of 21.54%, which indicates that learning has been effective with recommendations to strengthen awareness learning, facilities, and real media. The context dimension of learning planning has been supported by a strong DLP, although there is still a need to strengthen reflective activities and independent learning strategies. The input dimension shows that the initial learning conditions are sufficiently supportive of practice, judging from student motivation and the availability of facilities, but aspects of work safety and access to learning resources still need to be improved. In the process dimension, learning takes place actively and reflects the principles of deep learning through observation, discussion, practice, and reflection, although the limitations of physical product examples are still an obstacle. The product dimension shows good student learning outcomes, especially in creativity and mastery of textile practices, but the accuracy of techniques and the quality of practice reports need to be strengthened.

REFERENCES

- Adhi Kusumastuti, Ahmad Mustammil Khoiron, & Taofan Ali Achmadi. (2020). *Metode Penelitian Kuantitatif*. Deepublish Publisher.
- Afidah, N., & Evawati, D. (2025). Kreativitas Dan Inovasi Belajar Siswa Xi Keahloan Kuliner Pada Mata Pelajaran Produk Kreatif Dan Kewirausahaan Di Smkn 6 Surabaya. *Vocational: Jurnal Inovasi Pendidikan Kejuruan*, 5(3), 279–290. <https://doi.org/10.51878/vocational.v5i3.6872>
- Aiken, L. R. (1985). Three Coefficients for Analyzing the Reliability and Validity of Ratings. *Educational and Psychological Measurement*, 45(1), 131–142. <https://doi.org/10.1177/0013164485451012>

- Akbar, M. Z., Ichwanto, M. A., Fatahillah, M. A., Fadhilatuzzahro, H., & Muthmainnah, M. (2024). Peran Sekolah Menengah Kejuruan Dalam Mengurangi Tingkat Pengangguran. *Jurnal Inovasi Teknologi dan Edukasi Teknik*, 4(3), 3. <https://doi.org/10.17977/um068.v4.i3.2024.3>
- Akhadi, D. Y., & Shofwan, I. (2024). Evaluation of the CIPP Model of The Sewing Training Program. *Journal of Nonformal Education*, 10(1), 33–48. <https://doi.org/10.15294/jone.v10i1.1723>
- Amma, T., Komariyah, S., & Bahrudin, A. (2024). Perencanaan Pembelajaran Mata Pelajaran Pai dalam Kajian Teori Belajar Kognitif. *Cendekia: Jurnal Studi Keislaman*, 10(1), 1–18. <https://doi.org/10.37348/cendekia.v10i1.417>
- Anwar, M. S., Ratnasari, D., & Lestari, D. P. (2025). Kurikulum Merdeka Sebagai Upaya Peningkatan Kualitas Pendidikan Pada Abad 21 Di Pendidikan Dasar. *Jurnal PGSD: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 18(1), 13–20.
- Apoko, T. W., Setyawati, H., Assaadah, A., Kusumawaty, D., & Parameswari, L. A. (2025). Exploring Indonesian Vocational Students' Perspectives on Deep Learning in English Language Education. *Jo-ELT (Journal of English Language Teaching) Fakultas Pendidikan Bahasa & Seni Prodi Pendidikan Bahasa Inggris IKIP*, 12(1), 49. <https://doi.org/10.33394/jo-elt.v12i1.15155>
- Ardiansyah, M., & Nugraha, M. L. (2025). Implementasi Deep Learning untuk Meningkatkan Hasil Pembelajaran Di Sekolah Menengah Kejuruan (SMK) Se-Jakarta Barat. *Research and Development Journal of Education*, 11(1), 302. <https://doi.org/10.30998/rdje.v11i1.26453>
- Aryawan, F. N. (2023). Overcoming the Challenges of Vocational Education in Indonesian SMK: Ideas on Curriculum Improvement, Teaching Quality, And English Language Teaching. *Journal of Practice Learning and Educational Development*, 3(3), 243–252. <https://doi.org/10.58737/jpled.v3i3.226>
- Azman, W., & Saputra, D. (2025). Evaluasi Program Pembelajaran Pendidikan Agama Islam. *Edukasi*, 13(1), 162–170. <https://doi.org/10.61672/judek.v13i1.2934>
- Azzahra, Y., & Jaya, C. A. (2025). Pendekatan Deep Learning: Transformasi Mindful, Meaningful, dan Joyful dalam Pembelajaran Holistik. *EduInovasi: Journal of Basic Educational Studies*, 5(3). <https://doi.org/10.47467/edu.v5i3.9245>
- BKSAP. (2022). *CP Mata Pelajaran Desain dan Produksi Busana Fase F untuk SMK/MAK*. BKSAP Kemendikbudristek.
- Cronbach, L. J. (1951). Coefficient Alpha and the Internal Structure of Tests. *Psychometrika*, 16(3), 297–334. <https://doi.org/10.1007/BF02310555>
- Damayanti, R. P., & Rosyidah, R. (2025). Penerapan Model Joyful Learning untuk Meningkatkan Motivasi Belajar. *Jurnal Ilmia Penelitian Mahasiswa*. <https://doi.org/10.61722/jipm.v3i5.1468>
- Endang Suparman. (2019). Evaluation Of Learning Programs with the CIPP Model in College a Theoretical Review. *International Journal of Education, Information Technology and Other (IJEIT)*, 2(1), 120–127. <https://doi.org/10.5281/ZENODO.3666969>
- Ernawati, Y., Farida, C., Aulia, A. N., Zhauqi, R. R., Primadhani, M. A. N., & Wulandari, A. (2025). Pengaruh Fasilitas Pendidikan terhadap Kepuasan Belajar Siswa di SMK Ketintang Surabaya. *Jurnal Pendidikan Tambusai*, 9.
- Febrian, A. (2024). Peran Pendidikan Vokasi Pada Jenjang Pendidikan Tinggi Guna Mempersiapkan Warga Negara Muda Dalam Menghadapi Era Society 5.0. *Pelita: Jurnal Penelitian Dan Karya Ilmiah*, 24(1), 1–7. <https://doi.org/10.33592/pelita.v24i1.5016>
- Firdaus, H., & Anriani, N. (2022). Evaluasi Program Praktek Kerja Industri Pada Sekolah Menengah Kejuruan Menggunakan Model CIPP. *Jurnal Ilmiah Profesi Pendidikan*, 7(4). <https://doi.org/10.29303/jipp.v7i4.1011>
- Fitri, H. M., Khaerunnisa, P., Setiawan, E., & Wardoyo, S. (2025). Peningkatan Keterampilan Pra-Vokasional Siswa SMK melalui Project-Based Learning (PjBL): Studi Literatur. *Jurnal Pendidikan dan Pembelajaran Indonesia (JPPI)*, 5(1), 307–318. <https://doi.org/10.53299/jppi.v5i1.996>
- Fitrianti, F., & Hidayati, N. (2025). Peran Guru Dalam Meningkatkan Keterlibatan Belajar Siswa Di Kelas. *Damhil Education Journal*, 5(1), 64. <https://doi.org/10.37905/dej.v5i1.2788>
- Handayani, K., Kusumaningsih, W., & Sudana, I. M. (2024). The Influence of Practical Facilities on the Quality of Learning at State Vocational Schools. *Lembaran Ilmu Kependidikan*, 54(1), 206–219. <https://doi.org/10.15294/lik.v54i1.23521>

- Hasanah, R., Prayitno, H. J., Tuti, S., & Prakoso, V. (2025). Deep Learning-Based Learning Strategies in Realizing Meaningful, Critical, and Enjoyable Learning. *Deep Learning*, 1(2).
- Hastutiningsih, A. D., Sugiyono, S., Suyanto, S., & Ashyrnepsosov, V. (2024). Evaluation of Vocational Education Management in the Era of the Fourth Industrial Revolution and Society 5.0 at SMKN 2 Pengasih. *Jurnal Pendidikan Teknologi Dan Kejuruan*, 30(1), 51–61. <https://doi.org/10.21831/jptk.v30i1.70013>
- Howard, J. L., Bureau, J., Guay, F., Chong, J. X. Y., & Ryan, R. M. (2021). Student Motivation and Associated Outcomes: A Meta-Analysis from Self-Determination Theory. *Perspectives on Psychological Science*, 16(6), 1300–1323. <https://doi.org/10.1177/1745691620966789>
- Indramayanti, V. S., Hasanah, E., & Sudarsono, B. (2024). Peran Keterlibatan Siswa dalam Implementasi Pembelajaran Teaching Factory Terhadap Kesiapan Kerja Siswa di SMKN 1 Jatibarang. *Academy of Education Journal*, 15(2), 1725–1734. <https://doi.org/10.47200/aoej.v15i2.2673>
- Karim, S., & Indra, M. (2025). Improving vocational students' learning outcomes through an innovative instructional model: A quasi-experimental study. *Jurnal Pendidikan Vokasi*, 15(3). <https://doi.org/10.21831/jpv.v15i3.77430>
- Kemendikdasmen. (2025). *Pembelajaran Mendalam*. https://kurikulum.kemdikbud.go.id/file/1739796368_manage_file.pdf
- Kusmawati, H., Sahara, K. N. N., Asfiah, R. U., & Putri, R. (2025). Pemanfaatan Mindful, Meaningful, dan Joyful Learning untuk Meningkatkan Aktivitas dan Hasil Belajar Bahasa Indonesia Pada Siswa SD N 01 Guwo. *Jurnal Pendidikan Tambusai*, 9(2), 23117–23122.
- Kusumaningrum, A. P., Murwaningsih, T., & Indrawati, C. D. S. (2024). Implementasi kurikulum merdeka di SMK Negeri 1 Karanganyar (studi kasus pada guru produktif). *Jikap (Jurnal Informasi dan Komunikasi Administrasi Perkantoran)*, 8(1), 89. <https://doi.org/10.20961/jikap.v8i1.76264>
- Liu, Y., & Qiao, C. (2025). Deep learning-based AI-driven teaching models in Chinese high school English class: A case study of reading lessons. *Frontiers in Education*, 10, 1591393. <https://doi.org/10.3389/educ.2025.1591393>
- Mahrufah, M., & Rijanto, T. (2024). Pengaruh Self-Regulated Learning Terhadap Kemampuan Berpikir Kritis dan Hasil Belajar Siswa. *Jurnal Pendidikan Madrasah*, 9(2), 213–218. <https://doi.org/10.14421/jpm.2024.213-218>
- Micallef, A., & Newton, P. M. (2024). The Use of Concrete Examples Enhances the Learning of Abstract Concepts: A Replication Study. *Teaching of Psychology*, 51(1), 22–29. <https://doi.org/10.1177/00986283211058069>
- Nurdiana. (2024). Paradigma Baru Dalam Pedagogik: Menyongsong Deep learning sebagai Pendekatan Pembelajaran di Indonesia Abad Ke 21. *Sindoro Cendekia Pendidikan*, 8(4), 1–4. <https://doi.org/10.9644/sindoro.v3i9.252>
- Prasetyaningtyas, W., Nurmasitah, S., Widiastuti, W., & Ghufro, A. (2025). Transformation of Assessment Practices: Evaluation of the Implementation of Differentiated Assessment in the Garment Preparation Phase at Vocational High Schools. *Jurnal Penelitian Pendidikan*, 42(2), 192–197. <https://doi.org/10.15294/jpp.v42i2.29989>
- Prasetyaningtyas, W., Retnawati, H., & Djidu, H. (2023). Student Preferences in Choosing Social Media as a Learning Medium in Work Degree Courses: A Conjoin Analysis. *Proceedings of the 4th Vocational Education International Conference (VEIC 2022)*, 289–302. https://doi.org/10.2991/978-2-494069-47-3_35
- Prasetyaningtyas, W., & Wening, S. (2022). Needs Analysis to Develop a Practice Assessment Instrument for Learning Process During Covid-19 Pandemic. *Advances in Social Science, Education and Humanities Research*, 640, 307–311.
- Raisah, A., Al-Farizy, A. M., Dewi, K., Fikri, M., Maulana, M. I., Sriwardani, N., & Saputra, T. W. (2024). Penerapan Pembelajaran Berdiferensi di Sekolah Menengah Kejuruan (SMK). *Nozel Jurnal Pendidikan Teknik Mesin*, 6(3), 131. <https://doi.org/10.20961/nozel.v6i3.84065>
- Ritter, N. L. (2010). *Understanding a Widely Misunderstood Statistic: Cronbach's*.
- Roebianto, Roebianto, Savitri, Aulia, Suciyan, & Mubarakah. (2023). Content validity: Definition and procedure of content validation in psychological research. *Testing, Psychometrics, Methodology in Applied Psychology*, 30(1), 5–18. <https://doi.org/10.4473/TPM30.1.1>

- Rurisman, R., Ambiyar, A., & Aziz, I. (2023). Evaluasi Pelaksanaan Sekolah Penggerak di Sma Dengan Model Evaluasi CIPP. *Jurnal Muara Pendidikan*, 8(1), 124–130. <https://doi.org/10.52060/mp.v8i1.1064>
- Santosa, T. A., Sofianora, A., & Yastanti, U. (2023). Efektivitas Evaluasi Model CIPP Dalam Pembelajaran IPA di Indonesia: Meta- Analisis. *Jurnal Pendidikan dan Konseling*, 5(2), 2423–2430.
- Sari, N. P., & Setiawan, M. A. (2023). Evaluation Analysis Based on The CIPP Model in Vocational High School Guidance and Counselling Program. *Eurasian Journal of Educational Research*, 106, 29–49. <https://doi.org/10.14689/ejer.2023.106.003>
- Sayekti, Y. D., Yoto, Y., & Widiyanti, W. (2024). Analisis Keterampilan Kerja Alumni SMK Tata Busana pada Industri Fashion di Malang. *Ideguru: Jurnal Karya Ilmiah Guru*, 10(1), 700–705. <https://doi.org/10.51169/ideguru.v10i1.1661>
- Stufflebeam, D. L., & Coryn, C. L. S. (2014). *Evaluation Theory, Models, and Applications* (second).
- Stufflebeam, D. L., & Zhang, G. (2017). *The CIPP evaluation model: How to evaluate for improvement and accountability*. The Guilford Press.
- Sulkifli, Nade, E., Silfiah Khumairah, E., & Riska. (2024). Pendekatan CIPP dalam Evaluasi Program Pendidikan: Tinjauan Literatur pada Program Pendidikan di Indonesia. *JMPI: Jurnal Manajemen, Pendidikan Dan Pemikiran Islam*, 2(2), 136–143. <https://doi.org/10.71305/jmpi.v2i2.90>
- Suri, S., & Hariyati, N. (2024). Studi Literatur: Model Evaluasi CIPP Dalam Evaluasi Pendidikan. *JCP (Jurnal Cahaya Pendidikan)*, 10(1), 20–30. <https://doi.org/10.33373/chypen.v10i1.5950>
- Sutrina, D., Alim, J. A., & Anggriani, M. D. (2025). Konsep Joyful Learning dalam Meningkatkan Kualitas Pembelajaran. *Journal Educational Research and Development*, 02(01).
- Suwandi, Putri, R., & Sulastrri. (2024). Inovasi Pendidikan dengan Menggunakan Model Deep Learning di Indonesia. *Jurnal Pendidikan Kewarganegaraan dan Politik*, 2(2), 69–77. <https://doi.org/10.61476/186hvh28>
- Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all learners* (2nd edition). ASCD.
- Tomlinson, C. A., & Strickland, C. A. (2005). *Differentiation in Practice*. Association for Supervision and Curriculum Development.
- Utomo, J. B., & Prayitno, H. J. (2025). Strategies and Development of the Deep Learning Approach in Vocational High Schools in the Era of Global Computing. *Global Computing*, 1(1).
- Wahdan Wilsa, A., Rusilowati, A., & Cahyono, E. (2023). Evaluasi Program Plp Stkip Nu Indramayu Tahun 2023 Dengan Model Cipp. *Jurnal Evaluasi Pendidikan*, 14(1), 25–31. <https://doi.org/10.21009/jep.v14i1.35778>
- Wulandari, H. T., Susanto, H., Muhibbin, A., & Susilo, A. (2025). Evaluasi Pendidikan Vokasi di Era Revolusi Industri 4.0 dan Society 5.0. *Paedagogie*, 20(2).
- Yusuf, F. F. A. & Basrowi. (2023). The Effectiveness of the Internship Program for Vocational High School Students Using the CIPP Method. *JTP - Jurnal Teknologi Pendidikan*, 25(1), 15–28. <https://doi.org/10.21009/jtp.v25i1.33553>