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Educational Policy Development for Integrating Deep Learning Educational Values in Vocational High Schools: A Philosophical Approach

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ABSTRACT

This study examines the development of educational policy for integrating deep learning educational values within vocational high schools through a structuralist–hermeneutic framework. Vocational education is expected not only to produce technically competent graduates but also to cultivate critical thinking, professional ethics, and socio-cultural awareness. However, existing policies often prioritize short-term technical competencies and mechanistic assessment systems, limiting transformative learning. Employing a qualitative case study design grounded in Gadamerian hermeneutics, this research combines philosophical inquiry and limited empirical data from SMK 1 Ma'arif Sleman Yogyakarta. Data were analyzed through descriptive, interpretative, reflective, and structuralist approaches to examine the coherence between pedagogical practice, institutional structures, and local cultural contexts. Findings indicate that deep learning is implemented as a holistic pedagogical strategy integrating academic competence, character formation, Islamic values, and local wisdom. Key challenges include limited teacher preparedness, curricular rigidity, and infrastructural constraints. Strategic priorities emphasize structured planning, authentic project-based learning, cultural integration, and collaborative synergy. The study concludes that transformative vocational education requires systemic policy alignment bridging macro-level structures and micro-level pedagogical practice. Integrating deep learning within a structuralist framework strengthens contextual relevance, supports sustainable rural development, and advances a humanistically grounded model of vocational education. Therefore, recommendations for education policymakers point to the need for alignment in strategies for deep learning pedagogical practices in vocational education across all levels.

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1. INTRODUCTION

Vocational education plays a strategic role in preparing human resources who are competent, adaptive, and responsive to labor market demands as well as local development priorities. Vocational High Schools (*Sekolah Menengah Kejuruan*/SMK) are not only expected to produce technically skilled graduates, but also individuals who possess deep analytical capacity, professional ethics, and socio-cultural awareness. In this context, educational policy development functions as a critical instrument to ensure that learning processes in SMK are systematic, goal-oriented, and aligned with sustainable development objectives, particularly in rural areas.

The concept of deep learning educational values emphasizes meaningful, reflective, and conceptually grounded learning rather than mere procedural mastery. These values encompass critical thinking, problem-solving, collaboration, and the integration of knowledge, skills, and attitudes. However, the implementation of deep learning in vocational schools frequently encounters policy-related constraints. Curricular frameworks and instructional practices often remain oriented toward short-term technical competencies and mechanistic evaluation standards, thereby limiting opportunities for transformative and reflective learning (Learning et al., 2025).

Structuralism provides a relevant analytical framework for educational policy development, as it underscores the significance of social, institutional, and cultural structures in shaping educational practices. From this perspective, schools are understood as components of a broader systemic configuration in which curriculum, regulatory frameworks, school culture, and community contexts interact in structured and interdependent ways (Mao et al., 2024). Consequently, the integration of deep learning values cannot be detached from policy design that simultaneously considers national educational structures and local socio-cultural realities.

In rural areas of Yogyakarta, particularly in villages characterized by strong rural identities, vocational education operates within a socio-cultural environment shaped by enduring local wisdom. Values such as *gotong-royong* (mutual cooperation), collective responsibility, self-reliance, harmony with nature, and work ethics rooted in local traditions constitute social capital that can significantly reinforce deep learning implementation. Nevertheless, existing vocational education policies have not fully incorporated local wisdom as an integral component of learning structures and competency development (Putra, Rizqi Aji Surya; Marpanaji, 2025). Therefore, research examining the integration of deep learning educational values within vocational education becomes essential, especially considering that educational policy frameworks extend their influence to institutional contexts such as SMK 1 Ma'arif Sleman Yogyakarta, where this study was conducted.

Local wisdom in rural Yogyakarta functions not merely as cultural heritage, but as a living knowledge system relevant to vocational learning. Agricultural practices, traditional craftsmanship, environmental management, and village-based creative economies offer authentic contexts for cultivating deep, experiential learning. Without a coherent policy framework, however, such potential remains fragmented and dependent upon individual school or teacher initiatives rather than embedded within a structured educational system (Hermawan, Hary; Nugroho, Dhimas Setyo; Afif, Fuadi; Wijayanti, Anita; Ahmad, Albattat; Valeri, 2024).

The development of educational policy integrating deep learning educational values grounded in local wisdom requires a structural approach capable of bridging macro-level policy design and micro-level pedagogical practice. Policy must be formulated to strengthen curricular structures, school governance, and partnerships between vocational schools and rural communities (Budiantoro, 2022). Through such integration, learning can move beyond exclusive orientation toward modern industrial demands and contribute to the reinforcement of local identity and rural socio-economic sustainability (Rusdiana, 2015).

Moreover, Yogyakarta's rich cultural heritage and longstanding educational traditions provide a strategic opportunity to develop a contextualized model of vocational education policy. Integrating deep learning values with local wisdom through a structuralist lens offers an alternative to uniform and centralized policy approaches that often lack sensitivity to regional diversity. This is crucial to

ensure that rural vocational schools do not remain peripheral, but instead evolve into centers of locally grounded innovation.

In light of these conditions, research on Educational Policy Development for Integrating Deep Learning Educational Values in Vocational High Schools: A Structuralist Approach is both relevant and urgent. This study is expected to contribute theoretically to the advancement of vocational education policy discourse and to provide practical recommendations for policymakers and educational institutions in rural Yogyakarta. Ultimately, vocational education policy should function structurally to cultivate deep learning rooted in local wisdom while remaining oriented toward future societal transformation.

2. METHOD

2.1. Research Design

This study employed a complementary-method qualitative design grounded in philosophical inquiry. The theoretical framework was derived from the hermeneutics of Hans-Georg Gadamer, which served as the primary lens for interpreting textual and empirical data. The research adopted a qualitative case study approach, drawing on the second edition of Qualitative Inquiry and Research Design by John W. Creswell (Creswell, 2013). The design integrates analytical philosophy through four core elements: description, interpretation, reflection, and hermeneutic analysis. This configuration enabled a systematic exploration of the philosophical foundations and educational implications of the deep learning approach within vocational education settings.

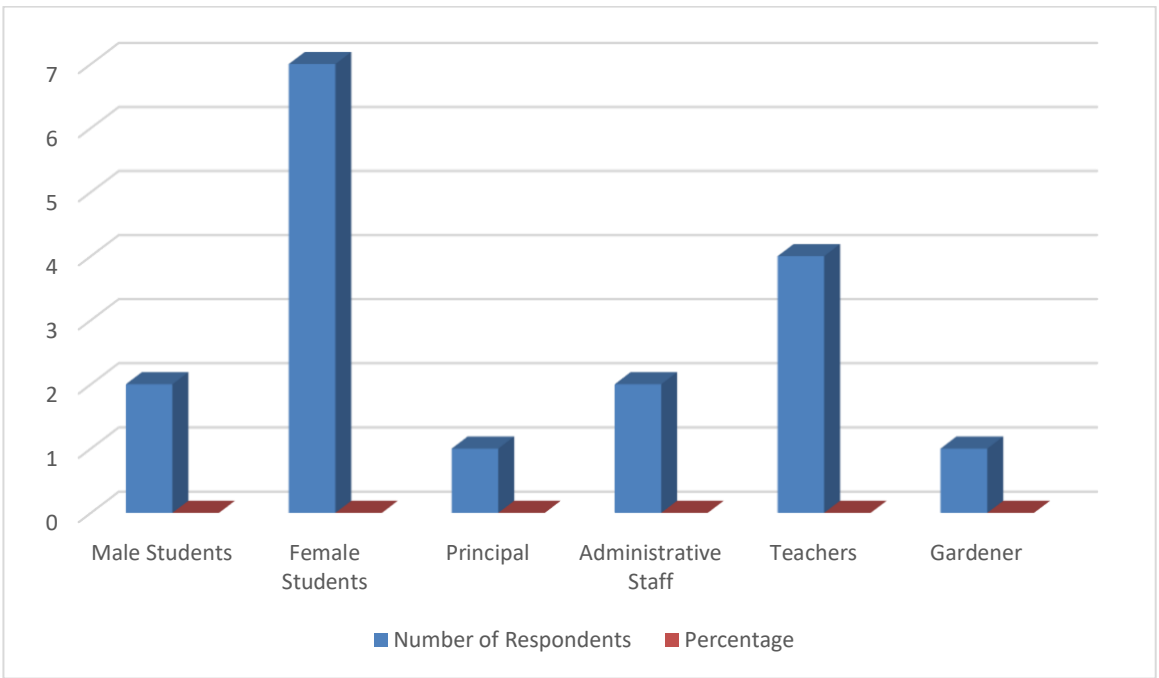


Figure 1. Distribution of respondents by number and percentage

This study was grounded in a philosophical inquiry framework aimed at critically interrogating the epistemological and normative foundations of deep learning within vocational education. Rather than positioning philosophy as merely a theoretical backdrop, the approach functioned as an interpretive lens through which empirical realities were examined. The field component involved 17 respondents from SMK 1 Ma'arif Sleman, Yogyakarta, intentionally selected to reflect the structural and sociocultural configuration of the school community. The participants comprised two male students, seven female students, one principal, two administrative staff members, four teachers, and

one school gardener, resulting in a gender distribution of 11 female and 6 male respondents. The inclusion of actors across hierarchical and functional strata was designed to capture the dialogical interplay between policy, institutional practice, and lived experience. By situating philosophical reflection in engagement with diverse stakeholders, the study enhances interpretive rigor and contextual depth, allowing normative analysis to emerge from, and remain accountable to, concrete educational realities.

2.2 Research Procedure

The research procedure consisted of four sequential stages. First, the study began with the formulation of a comprehensive research design. The researchers constructed a conceptual model aligned with the research type, specifying the topic, theme, formal object (philosophical analysis of deep learning as a learning approach), and material object (its implementation context). Second, an extensive literature review was conducted. Primary and secondary sources—including books, peer-reviewed journal articles, prior research reports, and scholarly essays—were collected to establish the theoretical and conceptual grounding of the deep learning approach. Third, the collected literature was systematically classified. Data were grouped according to thematic relevance and theoretical orientation. This process involved careful citation, textual extraction, and analytical organization of scholarly discussions concerning the deep learning learning approach. To complement the primary library-based data, limited field data were gathered from selected schools considered representative for supporting empirical insights. These contextual data functioned as secondary reinforcement for the philosophical analysis. Fourth, data processing and analysis were conducted in accordance with the research questions formulated in the proposal. The researchers analyzed the classified data to construct coherent arguments addressing each research problem, ensuring that philosophical interpretation and empirical context were integrated within a structured analytical framework.

2.3. Data Analysis

The analytical stage was primarily based on library research enriched with philosophical inquiry. The analysis incorporated four philosophical dimensions such as descriptive exposition of concepts, interpretative examination of meanings, critical-reflective evaluation, an hermeneutic understanding (Muzairi; Zuhri, H; Abror, R. H; Faiz, 2014). To deepen the analysis, the study employed structuralist philosophical perspectives to identify the underlying coherence (“red thread”) between the integration of deep learning–based educational values and the broader cultural and social structures in which they are embedded. Particular attention was given to the implementation context at SMK 1 Ma’arif Sleman Yogyakarta, examining how the adoption of deep learning as a pedagogical approach interacts with institutional culture and community dynamics.

The literature review on deep learning was further analyzed through Gadamerian hermeneutics, particularly emphasizing the role of language in shaping understanding and interpretation. In this framework, meaning is not treated as fixed but emerges dialogically through the fusion of horizons between text, context, and interpreter. This study contributes novelty in two principal respects. First, it addresses deep learning not merely as a derivative of artificial intelligence but as an emergent pedagogical model. Although originally rooted in artificial intelligence discourse, the deep learning concept has recently evolved—particularly since mid-2024—into a learning approach applicable within teaching and learning practices. Second, the study extends beyond the characterization of the deep learning approach to critically examine its aims and potential contributions to the sustainability and development of education in Indonesia.

The methodological relevance of employing a Gadamerian perspective when exploring data on "deep learning" policies lies in the interpretive process applied to the phenomenology and reality of vocational-based education. This approach considers cultural elements and traditions in Indonesia as the foundation for vocational education in pursuit of educational goals. Consequently, the landscape of vocational education within the community—as exemplified at SMK 1 Ma'arif Sleman, Yogyakarta—reflects an accumulation of the history and culture inherent to the local region.

3. FINDINGS AND DISCUSSION

In this section, a. Deep Learning as a Holistic Pedagogical Strategy: Integrating Academic Competence, Character, and Islamic Values. The understanding of deep learning at SMK 1 Ma'arif Sleman Yogyakarta indicates that the learning process is not merely oriented toward the attainment of academic scores, but rather toward the strengthening of conceptual understanding that can be meaningfully applied in everyday life and professional contexts. Teachers emphasize that students should move beyond rote memorization of theoretical content and instead develop the capacity to connect instructional material with contextual experiences, whether through laboratory practice, school-based entrepreneurship programs, or participation in extracurricular activities. This pedagogical orientation aligns with the school's vision of producing graduates who embody Islamic character while demonstrating professional competence. Within this framework, deep learning is positioned as a strategic approach to enhancing both academic quality and practical skill development.

Furthermore, active student engagement constitutes a central component of the instructional process. Teachers function as facilitators who guide dialogue, collaborative discussions, and group-based inquiry, thereby fostering critical thinking and reflective learning practices. The classroom is reconceptualized not as a unidirectional space for knowledge transmission, but as a dialogical arena that cultivates mindful learning and joyful learning. For instance, in project-based learning contexts, students are encouraged to integrate theoretical knowledge with field-based practice relevant to their respective vocational tracks, such as computer engineering, online business, and accounting. Through this integrative approach, deep learning becomes more concrete, contextualized, and meaningful for students lived experiences (Amalia et al., 2025).

Moreover, the implementation of deep learning at SMK 1 Ma'arif Sleman Yogyakarta is directed toward the holistic development of attitudes, skills, and character in alignment with Islamic values and the national Profil Pelajar Pancasila framework. The school provides structured opportunities for students to cultivate spiritual, social, and cultural competencies through activities such as hadroh (Islamic musical arts), cultural parades, and Islamic entrepreneurship initiatives. An inclusive, collaborative, and experience-oriented learning environment is regarded as instrumental in fostering responsibility, independence, and social sensitivity among students. Accordingly, deep learning in this institutional context not only strengthens academic competence but also contributes to the formation of competitive graduates with strong moral character, responsive to societal expectations and labor market demands (Amalia et al., 2025) (Shinta & Arsyad, 2025).

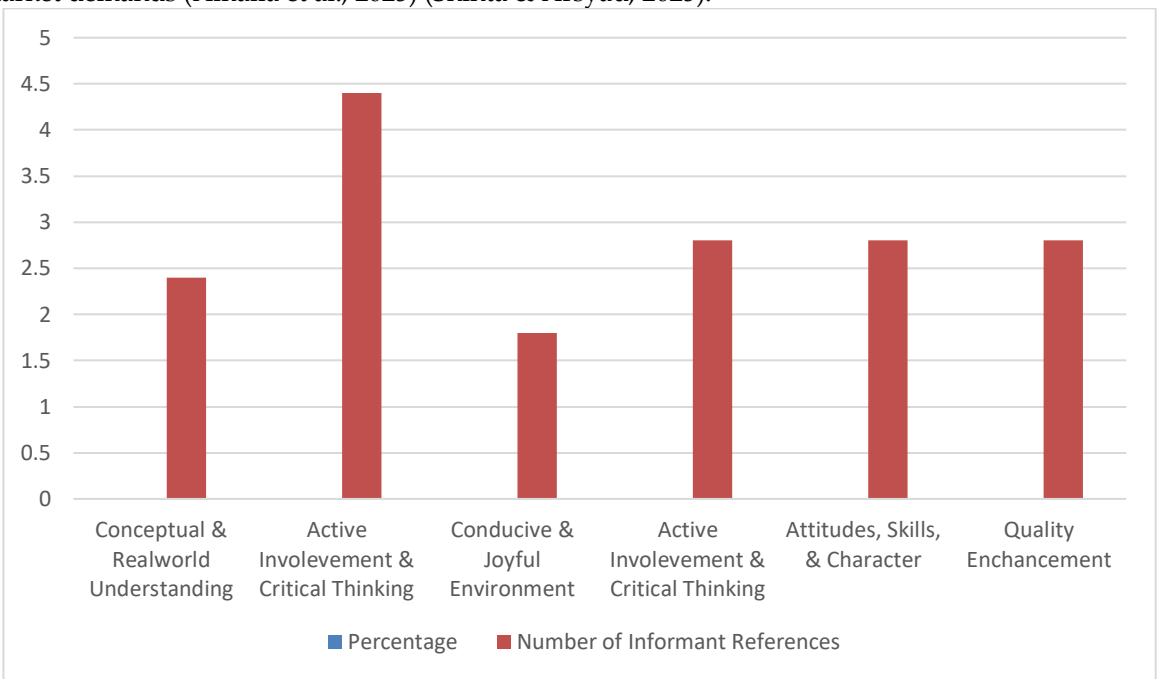


Figure 2. Understanding of the deep learning concept at SMK 1 Ma'arif Sleman Yogyakarta

3.1. Hermeneutic Analysis of Deep Learning at SMK 1 Ma'arif Sleman Yogyakarta

The conceptualization of deep learning at SMK 1 Ma'arif Sleman Yogyakarta can be critically examined through the hermeneutic framework of Hans-Georg Gadamer, particularly his notion of the fusion of horizons. Within this perspective, students' horizons of understanding—shaped by lived experience, Islamic values, and local cultural traditions—encounter and interact with the new horizons of disciplinary knowledge introduced by teachers. Learning, therefore, transcends the mere transmission of content and instead becomes a dialogical meeting of meanings between students' personal experiences and formal academic knowledge.

For instance, in entrepreneurship courses, students do not simply acquire theoretical business concepts; they connect these ideas to practical selling activities within the school environment. This interaction exemplifies the fusion of horizons, enabling students to construct understanding that is both profound and contextually relevant to their lived realities (Judhananto & Sitorus, 2025).

Gadamer further underscores the centrality of dialogue as the medium of understanding. This principle is reflected in pedagogical practices at SMK 1 Ma'arif Sleman Yogyakarta, where teachers actively encourage questioning, discussion, and critical engagement. Through such dialogical processes, students do not passively receive knowledge; rather, they interpret, examine, and reflect upon its meaning within their experiential contexts. Collaborative projects, classroom discussions, and extracurricular activities function as hermeneutic spaces that enrich shared understanding. In this sense, deep learning at the school aligns with Gadamer's assertion that understanding emerges through dialogical interaction and remains an open, evolving process.

Moreover, Gadamerian hermeneutics emphasizes the historical situatedness of understanding and the role of pre-understanding *(Vorverständnis)*. At SMK 1 Ma'arif Sleman Yogyakarta, students' pre-understandings of education are shaped by religious backgrounds, local culture, and future career orientations. Through a deep learning approach, these pre-understandings are not negated but instead serve as foundational entry points for more meaningful learning experiences. For example, students accustomed to religious activities more readily internalize values such as discipline and collaboration when these are integrated into instructional contexts. Accordingly, deep learning strengthens not only cognitive dimensions but also character formation in alignment with the Profil Pelajar Pancasila framework, consistent with Gadamer's view that understanding entails self-transformation through experience.

In the instructional context of SMK 1 Ma'arif Sleman Yogyakarta, students' understanding of deep learning emerges from their pre-existing experiential and cultural horizons, including local traditions, religious values, and prior educational experiences. In accordance with the philosophical hermeneutics of Hans-Georg Gadamer, understanding is never neutral; rather, it is historically affected and contextually situated. Hierarchical analysis (Gadamer, 1976) indicates that students consistently emphasize the importance of linking theoretical content to practical application in real-life settings. In this regard, pre-understanding operates as an epistemological foundation that enables learners to interpret new knowledge through the lens of lived experience, thereby rendering deep learning relevant, contextualized, and meaningful within vocational education.

The implementation of deep learning is further manifested in students' active engagement within a dialogical and supportive learning environment. Teachers function as facilitators who cultivate critical dialogue, collaborative inquiry, and project-based learning. This pedagogical orientation resonates with Gadamer's ontological claim that language constitutes the medium of understanding, positioning dialogue as the central process through which meaning is constructed (Xavier & Pertierra, 2020) (Gadamer, 1976). Through dialogical interaction, students' experiential horizons intersect and merge with the disciplinary horizons introduced by teachers, generating a more integrated and reflective comprehension. Informants underscore the significance of critical thinking, the recognition of individual interests and talents, and the creation of a joyful learning atmosphere as essential dimensions of this transformative learning process (Haq & Prasetiyo, 2025).

Ultimately, the implementation of deep learning in this vocational setting aspires to form learners who demonstrate not only cognitive proficiency but also character development aligned with the Profil

Pelajar Pancasila. This objective corresponds with Gadamer's (Gadamer, 2004) transformative conception of understanding where in genuine understanding entails a reconfiguration of the self. Empirical findings reveal that the cultivation of attitudes, practical skills, and moral character, alongside the enhancement of students' overall personal quality, represents the culminating orientation of deep learning practices. Accordingly, deep learning (Maimun; Hamdani; Listiana, Heni; Lape, 2025) transcends mere conceptual mastery and advances toward the holistic transformation of learners through meaningful, experiential, and contextually grounded engagement with knowledge.

3.2. Challenges in the Implementation of Deep Learning

Findings from a Focus Group Discussion (FGD) on the implementation of deep learning at SMK 1 Ma'arif Sleman Yogyakarta, conducted on 30 August 2025, identify several interrelated challenges. The most significant constraint concerns limited teacher understanding and professional training (17%), underscoring educator readiness as a dominant factor in successful implementation. Teachers require strengthened pedagogical and methodological competencies to effectively integrate meaningful, mindful, and joyful learning principles into instructional practice. Without adequate conceptual grounding, the implementation of deep learning risks becoming superficial and yielding limited impact on instructional quality.

Additional challenges include difficulties in designing inquiry-based learning (15%) and constraints related to time allocation and curricular demands (13%). Although teachers conceptually acknowledge the urgency of deep learning, practical implementation is often hindered by rigid curriculum structures and dense content requirements. The FGD further highlights infrastructural limitations (11%) and variations in student character and motivation (9%), which complicate the consistent application of deep learning strategies. These conditions necessitate adaptive pedagogical approaches responsive to institutional realities and learner diversity.

Cultural and structural factors also emerge, including the integration of local cultural values (6%), limited mentoring support and time allocation (6%), and other minor yet notable constraints (3–4% each). Collectively, these findings suggest the need for systemic synergy among teachers, school leadership, and broader educational stakeholders. Sustainable professional development, optimized resource utilization, and collaborative institutional support are essential for addressing these challenges progressively. Overall, the FGD results indicate that implementing deep learning at SMK 1 Ma'arif Sleman Yogyakarta requires a comprehensive strategy encompassing teacher capacity building, curricular alignment, and consistent systemic support.

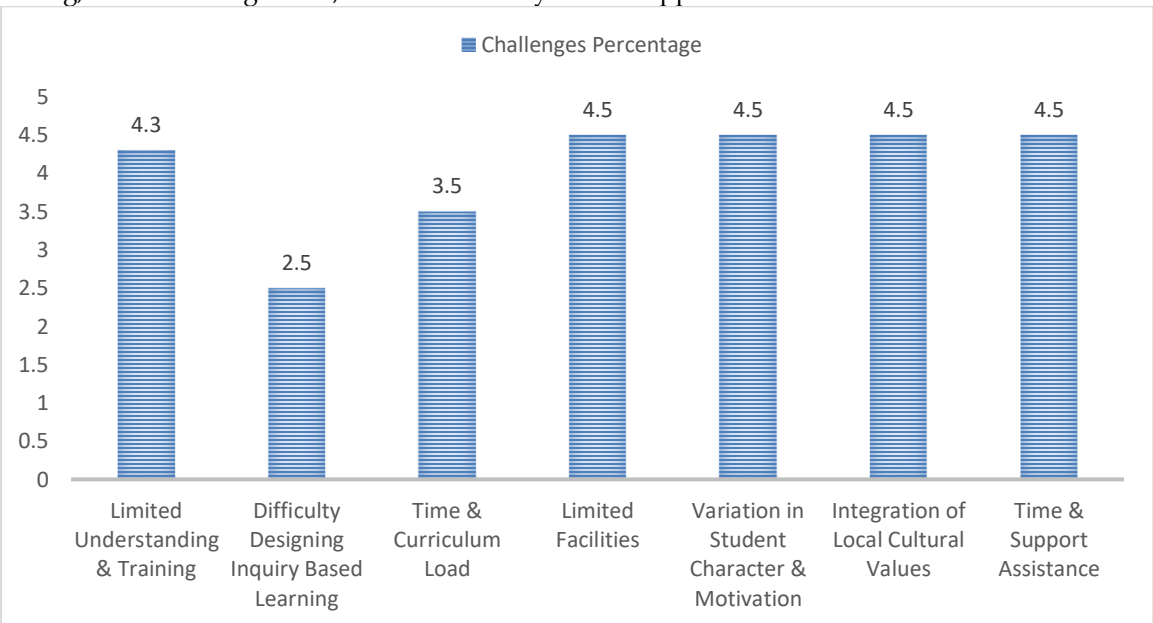


Figure 3. Forms of challenges in the implementation of deep learning at SMK 1 Ma'arif Sleman Yogyakarta

From a Gadamerian hermeneutic perspective (Wijaya & Asy, 2021), the FGD findings at SMK 1 Ma'arif Sleman Yogyakarta concerning the implementation of deep learning may be interpreted as a dialogical process among teachers' experiences, students' perspectives, and existing curricular structures. Hans-Georg Gadamer emphasizes that understanding unfolds within the hermeneutic circle, a dynamic interplay between parts and whole. The limited pedagogical understanding among teachers (17%) and difficulties in designing inquiry-based learning (15%) suggest that the meaning of deep learning has not yet been fully integrated into the experiential horizons of educators. In this regard, understanding cannot remain merely technical; it requires a deeper interpretive engagement with the concept of deep learning so that it becomes congruent with the realities of vocational education.

Furthermore, Gadamer's phenomenology highlights the importance of the fusion of horizons, namely the encounter between the horizon of tradition and that of the present (Gadamer, 1976) (Regan, 2012). Challenges such as infrastructural limitations, variations in student motivation, and curriculum overload may be interpreted as tensions between the ideality of deep learning theory and the practical realities of school implementation. The FGD thus becomes a dialogical space in which teachers reinterpret their experiences, moving beyond technical constraints toward a reflective awareness that deep learning can be enacted in ways responsive to local conditions. In this sense, limitations should not be perceived solely as obstacles, but as opportunities to expand shared horizons of understanding.

Ultimately, Gadamerian hermeneutics allows us to view the implementation of deep learning at SMK 1 Ma'arif Sleman Yogyakarta not as the mechanical transfer of a pedagogical concept, but as an ongoing dialogue among theory, teacher experience, and school culture. The integration of local cultural values (6%) and the need for sustained mentoring reinforce the notion that authentic understanding emerges only through participatory and reflective engagement. In line with Gadamer's phenomenology, educational experience is not static but dynamic—understanding grows through interaction, dialogue, and critical reflection. Hence, the FGD findings not only map institutional challenges but also open interpretive space for constructing more contextual and meaningful deep learning practices.

A critical analysis addressing key challenges faced by teachers, pedagogical understanding, and curriculum load within the context of vocational high school (SMK) governance points to the need for aligning theory and practice when implementing "deep learning" approaches (Khurniawan et al., 2026) (Primartadi et al., 2025). Teachers who are not yet accustomed to incorporating deep learning into their instructional processes require specific introductions and training to master both the theory and practical application of these methods (Aribah et al., 2025). Furthermore, this effort must be reinforced by a shared pedagogical understanding among all members of the school community, including teachers, students, and educational staff (Hertanto et al., 2026) (Indrayani et al., 2025). The Kurikulum Merdeka (Independent Curriculum) which remains in use also requires an integrated alignment with the school's specific culture, as is the case at SMK 1 Ma'arif Sleman, Yogyakarta, which is situated within a rural community.

3.3. Strategies for the Implementation of Deep Learning in Schools

Based on the FGD conducted at SMK 1 Ma'arif Sleman Yogyakarta on 30 August 2025, several strategic priorities emerged regarding the implementation of deep learning. The highest proportions were attributed to structured planning and guidelines (27%) and the use of authentic projects emphasizing critical, creative, and reflective activities (27%). These findings indicate that participants perceive systematic instructional design and contextual project-based learning as foundational strategies for operationalizing deep learning. Comprehensive planning ensures direction and coherence, while authentic projects provide students with opportunities to construct meaningful understanding through direct practice.

The integration of local culture (20%) also constitutes a significant strategic dimension, underscoring that deep learning should not be framed merely as a modern pedagogical innovation but must be rooted in students' socio-cultural contexts. Such integration fosters authentic learning

experiences that resonate with students' everyday realities. Institutional synergy and collaboration (13%) further complement these strategies, as the successful implementation of innovative approaches requires cooperative engagement among teachers, students, and educational stakeholders. Collaborative synergy strengthens execution while facilitating collective reflection and continuous improvement.

Although receiving smaller proportions, the role of teachers as facilitators (6%) and the utilization of project modules (7%) remains strategically significant. Teachers are expected to transition from information transmitters to dialogical guides who support students in constructing knowledge autonomously. Project modules function as practical instruments to ensure consistency and coherence in implementation. Overall, the FGD findings emphasize that deep learning strategies at SMK 1 Ma'arif Sleman Yogyakarta require the integration of structured planning, contextual projects, cultural grounding, and collaborative engagement, while sustaining supportive pedagogical roles and instructional tools.

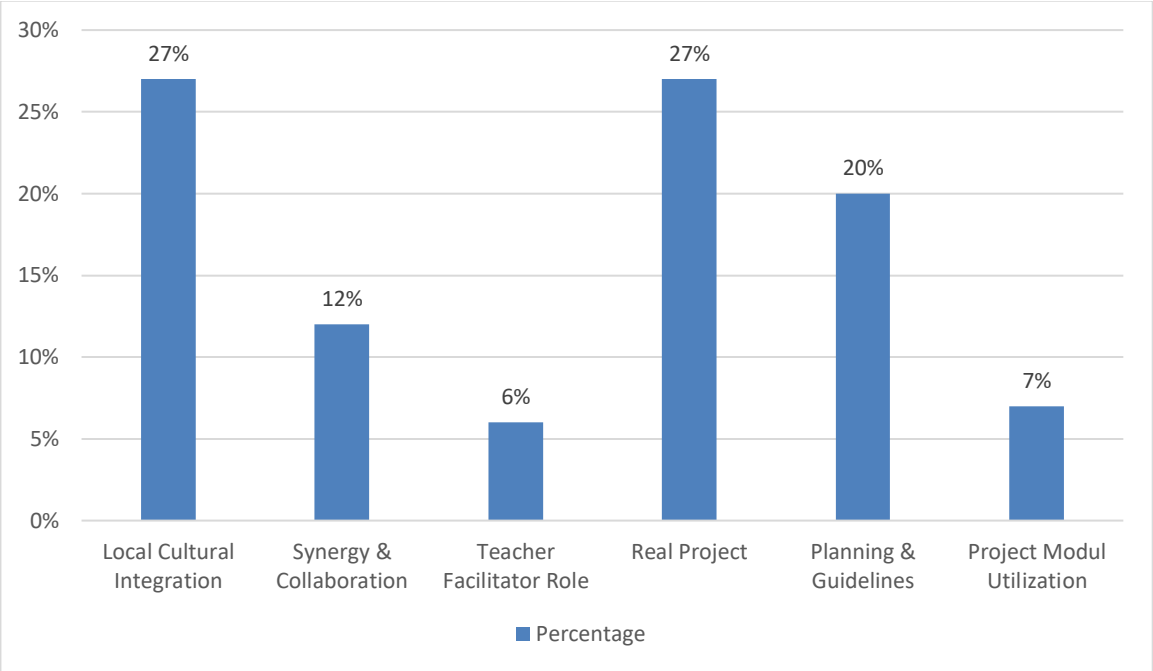


Figure 4. Strategies for implementing deep learning at SMK 1 Ma'arif Sleman Yogyakarta

From a Gadamerian hermeneutic standpoint (Hogan, 2017), the emphasis on planning and guidelines (27%) alongside authentic projects (27%) reflects an effort to establish a hermeneutic circle between theory and practice. Deep learning is interpreted not as an abstract construct but as a concept embodied within structured planning and experiential project-based learning. Through this interpretive process, deep learning transcends theoretical discourse and merges with students' experiential horizons via critical, creative, and reflective engagement. Thus, understanding emerges through a dynamic dialogue between modern pedagogical frameworks and the lived realities of vocational education (Fauziati, 2025).

Moreover, the integration of local culture (20%) and collaborative synergy (13%) exemplifies what Gadamer terms the fusion of horizons. The horizon of tradition—represented by students' cultural values—encounters the contemporary horizon of deep learning, characterized by learner autonomy and twenty-first-century competencies. This fusion does not eliminate difference (Gadamer, 1976) (Xavier & Pertierra, 2020), rather, it enriches interpretive meaning and strategic development. The FGD becomes a dialogical arena connecting multiple perspectives—teachers, students, and stakeholders—thereby generating a collective understanding of how deep learning should be enacted within the school's local context.

The teacher's role as facilitator (6%) and the use of project modules (7%) may further be interpreted as a transformation of pedagogical meaning. Teachers are repositioned as dialogical partners guiding students toward meaning-making through lived experience. Even when quantitatively less dominant, project modules serve as material supports for sustaining pedagogical dialogue. Accordingly, the strategies articulated in the FGD reflect Gadamer's view that educational understanding remains open, evolving, and continuously shaped through dialogue, interpretation, and shared reflection.

The thematic analysis identified three interrelated themes concerning the implementation of deep learning in vocational education. First, conceptual understanding and pedagogical readiness emerged as a central theme, encompassing teachers' understanding of deep learning principles, their capacity to design inquiry-based learning, and their ability to facilitate active, critical, and creative thinking. The findings indicate that conceptual and real-world understanding was the most frequently referenced component (29.4%), while limited understanding and training (17%) and difficulties in designing inquiry-based learning (15%) were prominent implementation challenges. These findings suggest that successful implementation requires sustained professional development that strengthens teachers' conceptual knowledge and practical pedagogical competencies.

Second, contextual integration and the creation of meaningful learning experiences represented a theme connecting instructional practices with students' characteristics, local cultural values, and the school environment. Informants emphasized the importance of real-world projects, collaboration, and the integration of local cultural values to make learning more relevant to vocational competencies and students' everyday experiences. Real-project activities and local cultural recognition each accounted for 27% of the reported implementation strategies, while conducive and joyful learning environments constituted 17.6% of the identified deep learning components. However, variations in students' motivation and character, limited facilities, and curriculum demands could constrain these practices. This theme highlights the importance of context-sensitive pedagogical design that combines authentic vocational tasks, collaborative learning, and culturally responsive approaches.

Third, institutional support and continuous pedagogical improvement emerged as a theme emphasizing the organizational conditions necessary for sustainable implementation. Informants identified planning and clear guidelines (20%), synergy and collaboration (13%), and project-module utilization (7%) as relevant strategies, alongside the need for adequate time, mentoring, and institutional support. These findings indicate that deep learning cannot depend solely on individual teachers' initiative; it requires coordinated efforts involving school leaders, teachers, administrative staff, and other relevant stakeholders. Accordingly, school-level policies should integrate deep learning into instructional planning, professional development, academic supervision, and evaluation. Taken together, the three themes suggest that effective deep learning in vocational education depends on the alignment of teacher readiness, contextualized learning experiences, and sustained institutional support.

3.4. Transformative Educational Policy in Vocational High Schools: Integrating Deep Learning Educational Values within a Structuralist Framework

Transformative educational policy in Vocational High Schools (SMK) requires a paradigmatic shift from a predominantly technocratic orientation toward a reflective, dialogical, and meaning-centered approach. In the Indonesian context, this direction aligns with the spirit of deep learning, which extends beyond technical skill acquisition to encompass critical awareness, ethical formation, and professional identity development (Dekawati & Kurnaeti, 2023). To establish a rigorous philosophical foundation, the hermeneutic thought of Hans-Georg Gadamer, particularly as articulated in Truth and Method (Gadamer, 2004), provides a compelling framework. However, from a structuralist perspective, this transformation cannot remain at the level of pedagogical interaction alone; it must also address the institutional, curricular, and regulatory structures that condition how learning is organized and assessed (Wijaya & Ehwanudin, 2021).

Philosophically, the formulation of an educational policy model which could be adapted by other developing nations to integrate local cultural or religious values into technical vocational education can

utilize Gadamer's structuralist framework. This is due to the essential need for a structure when implementing "deep learning"-based educational policies within a vocational education environment. Without a specific form or structure to serve as a framework for deep learning, it becomes difficult to identify patterns for integrating local cultural values into technical vocational education. Consequently, at least three stages of organizing deep learning-based vocational education as applied in vocational high schools are required.

First, Gadamer's concept of pre-understanding emphasizes that learners enter the classroom with historically and socially shaped experiences, assumptions, and value orientations. Within a deep learning framework, such pre-understandings are not eliminated but engaged dialogically as the starting point of interpretation (Gadamer & Brotz, 1977). For example, in Automotive Engineering programs, students who have assisted in family-run workshops possess tacit mechanical knowledge. Rather than replacing this experiential knowledge with abstract theory, teachers facilitate reflective engagement between practice and mechanical principles. Structurally, this implies the need for adaptive curricula that recognize students' socio-cultural capital, challenging standardized and rigid curricular frameworks that overlook contextual diversity (Gadamer & Brotz, 1977) (Izzatulbuhtiah, 2026).

Second, the notion of fusion of horizons explains that understanding emerges from the encounter between the learner's experiential horizon and the disciplinary tradition represented by the teacher. In deep learning environments, this process materializes through critical dialogue rather than unidirectional knowledge transmission (Xavier & Pertierra, 2020) (Jamaly, Za'farullah; Hidayatunnisa, Nazwa; Azzahra, Velisa; Wahid, Ramadhani Firmansyah, 2024). For instance, in Software Engineering programs, students may develop applications for local micro-enterprises, where programming theory intersects with real market demands. From a structuralist standpoint, such pedagogical encounters require systemic support—formalized industry partnerships, flexible scheduling, and project-based assessment mechanisms—so that the fusion of horizons is institutionally embedded rather than incidental (Hornby, n.d.).

Third, for Gadamer, language constitutes the primary medium of understanding. Meaningful learning therefore presupposes dialogical spaces in which students articulate, negotiate, and reinterpret their experiences (Nurullaila, 2025). In vocational practice, reflective discussions following industrial internships (Prakerin) enable students not merely to report tasks performed, but to interpret their experiences in relation to emerging professional identities. Structurally, schools must institutionalize reflective forums, mentoring systems, and qualitative assessment models to sustain this dialogical dimension. Without structural alignment, reflective practices risk being marginalized within performance-driven systems (Maulana, 2025).

Regarding the second research problem, the principles of meaningful, mindful, and joyful learning demonstrate strong conceptual resonance with hermeneutics and critical phenomenology (Regan, 2012). Meaningful learning connects instructional content to students' lifeworlds, acknowledging that knowledge is historically situated. In Culinary Arts programs, for example, students move beyond procedural recipe execution to critically interpret local culinary traditions and market dynamics. Structurally (Maulana, 2025), this requires curricular flexibility that accommodates local cultural integration while maintaining competency standards.

Mindful learning aligns with Gadamer's rejection of rigid objectivism by emphasizing reflective awareness of the learning process itself. In vocational contexts, problem-based learning such as analyzing production failures or design errors encourages students to interrogate causes, implications, and ethical dimensions (Hasanah, Rizwatu; Prayitno, Harun Joko; Tuti, Suni; Sarilan; Prakoso, 2025). A structuralist analysis highlights the necessity of assessment reform: systems must shift from purely outcome-based examinations toward evaluative models that value reflective reasoning and process-oriented competence (Matusov & Soslau, 2010).

Joyful learning, meanwhile, corresponds to the dialogical recognition of learners as meaning-making subjects. Positive and participatory learning environments strengthen existential engagement and intrinsic motivation (Hasanah, Rizwatu; Prayitno, Harun Joko; Tuti, Suni; Sarilan; Prakoso, 2025).

In Visual Communication Design programs, allowing students to develop creative projects aligned with their interests fosters ownership and authentic expression (Utomo et al., 2025). Structurally, this demands institutional cultures that grant pedagogical autonomy and reduce excessive bureaucratic standardization that may suppress innovation.

Addressing the third research problem, the implementation of Gadamerian hermeneutics in Indonesia implies a broader epistemological shift from content-dominated curricula toward dialogical and reflective curricular architectures (Mccormack, 2014). While national standards and quantitative assessments remain important, they must be complemented by qualitative, reflective instruments. Internship reports, for instance, can be transformed into analytical essays evaluating professional growth, ethical awareness, and contextual problem-solving. Structural reform at policy and accreditation levels is therefore indispensable (Utami et al., 2025).

Furthermore, a structuralist perspective underscores that educational meaning is mediated by socio-cultural configurations. Vocational schools in coastal regions confront different economic realities than those in urban industrial zones (Romadin & Mujahidin, 2022). Transformative educational policy thus entails calibrated autonomy, enabling schools to contextualize deep learning within local socio-economic ecosystems while maintaining national competency benchmarks (Muttaqin et al., 2024). Rather than imposing uniformity, policy should function as a flexible structural framework that supports contextual interpretation (Prihantoro et al., 2025).

Overall, the integration of deep learning values within a structuralist-hermeneutic framework yields a comprehensive model of vocational education that transcends narrow labor-market instrumentalism. It cultivates reflective consciousness, professional ethics, and adaptive capacity alongside technical expertise. Transformative policy in SMK must therefore reorient its logic—from producing labor-ready graduates toward forming critically aware professionals capable of interpretation, innovation, and responsible participation in dynamic socio-industrial environments. When philosophical grounding and structural reform converge, vocational education becomes not only economically relevant but also humanistically meaningful.

4. CONCLUSION

In conclusion, the integration of the philosophical hermeneutics of Hans-Georg Gadamer with a structuralist approach provides a robust conceptual foundation for transformative educational policy in vocational education. Deep learning should not be reduced to a pedagogical technique; rather, it constitutes a paradigmatic shift that connects learners' pre-understandings, dialogical meaning-making processes, and the institutional structures that shape educational practice. Within this integrated framework, meaningful, mindful, and joyful learning emerge not merely as instructional principles, but as systemic outcomes supported by coherent curricular design, assessment models, and organizational culture.

Empirical evidence from SMK 1 Ma'arif Sleman Yogyakarta demonstrates that the operationalization of deep learning can be implemented in a structurally aligned and philosophically grounded manner. The school's practices such as project-based learning, reflective dialogue, integration of local culture and Islamic values, and sustained collaboration with industry partners, are embedded within an institutional ecosystem that supports interpretive engagement and contextual relevance. This alignment between pedagogical vision and organizational governance represents a critical factor in ensuring the sustainability and effectiveness of deep learning implementation.

From a theoretical standpoint, the model developed at SMK 1 Ma'arif Sleman Yogyakarta offers transferable principles with broader applicability. The emphasis on pre-understanding, fusion of horizons, contextualized projects, and structurally supported reflective practice addresses universal challenges in vocational education, including the tension between labor-market responsiveness and holistic character formation. By situating deep learning within both dialogical and structural dimensions, the model moves beyond fragmented innovation toward a coherent educational architecture.

Accordingly, the contribution of SMK 1 Ma'arif Sleman Yogyakarta extends beyond a localized best practice and presents a conceptual and practical framework with potential relevance at national and international levels. Its integrative approach illustrates how vocational institutions can cultivate technically competent, ethically grounded, and reflexive graduates through systemic alignment between philosophy, pedagogy, and policy. With further empirical validation and comparative studies, this model holds significant potential to inform the global discourse on transformative vocational education in the twenty-first century.

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