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Implementation of Deep Learning of Quality and Conceptual Understanding Oriented Learning at SMA PGRI Pekanbaru

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A B S T R A C T

Deep learning is that learning oriented to conceptual understanding and critical thinking is a solution in improving the quality of education. This concept emphasizes the active involvement of students in the exploration, analysis and application of knowledge in real contexts. This research aims to find out and explore the application of deep learning in quality education strategies. Data was collected through interviews, observations, and document analysis. This research uses a qualitative approach with a case study design to explore the implementation of deep learning of quality learning and oriented to conceptual understanding. The data source consists of teachers and students who have direct experience in this method, selected through purposive sampling techniques. Data were collected through in-depth interviews, observations, participatory and document analysis. The result of this study is that if the steps are carried out consistently and collaboratively, then deep learning has great potential to increase the effectiveness of the independent curriculum and form students who are not only cognitively intelligent, but also reflective, critical and characterful. The conclusion of this study is that the implementation of deep learning of quality learning and oriented to conceptual understanding can improve the quality of education, critical thinking skills, and problem-solving skills among students.

Keywords: *Implementation, Quality, Orientation, Conceptual*

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INTRODUCTION

Deep Learning is a learning approach that has been known since the 1970s. Definition of Deep Learning According to Bahgat, learning is not enough just to activate students. Learning must be active and also deep. Deep learning introduces the concept of 3P (Precise, Process, and Product). Education is not just about transferring information, but building deep awareness and understanding. In the era of globalization, technology has become an inseparable part of people's lives, both in urban and rural areas. The widespread use of technology is an indicator of a nation's progress. The higher the use of technology by the population, the greater the country's potential to develop. Quality learning is an effective and efficient learning process in achieving educational goals, by involving all learning components (teachers, students, curriculum, environment, etc.) systematically and synergism. The importance of quality learning improves student learning achievement, Forms superior student character, Prepares students to face global challenges, Creates a quality next generation of the nation. Education-oriented learning refers to an approach to learning that places the focus on the student as the main subject and is active in the learning process. This approach emphasizes on the development of students' potential as a whole, not only cognitive, but also affective and psychomotor aspects.

In Indonesia, the implementation of the deep learning model is in line with the principles in the Independent Curriculum which prioritizes freedom of learning and emphasis on project-

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based learning. This curriculum provides space for students to explore learning topics in more depth and contextual, according to their interests and potential (Sari, 2023). Therefore, a deep learning approach that emphasizes meaningful and mindful learning experiences is very relevant to be applied in the context of education in Indonesia. Although there are still many history teachers who use traditional learning methods such as lectures and memorization so that they seem monotonous, less interesting and irrelevant to daily life. This causes low interest and motivation for students to learn history, even students have a perception that history is a difficult subject. Teachers have a strategic role in building a deep learning mindset in students. As a learning facilitator, teachers are required to have a good understanding of this concept and be able to apply it in the teaching process. By utilizing innovative methods such as problem-based and experimental approaches, teachers can help students understand math and science concepts in depth. In addition, continuous professional training for teachers is a key factor in building this mindset (Hattie, 2012).

Technology continues to develop along with scientific advancements, according to (Nasser, 2021) that the benefits of technology are to facilitate human work by utilizing technology as additional labor and anticipating the limitations of human work. The special gift of the Creator to every human being is the gift of reason, the nature of reason as something special because it is this reason that directs the potential of the intellect in a different direction or path, or it may also be because of the different levels of human intelligence potential so that some of them see accurately what others do not see. According to (Arifudin, 2022) that every human being has potential, and the one who optimizes his potential more is a human being who knows himself. In other words, it can be stated that human life in this world becomes static or dynamic, backward or advanced, primitive or advanced civilization and so on is greatly influenced by the activity of human intelligence that continues to think, innovate, make choices, and or have different wills.

(Wijaya et al., n.d.-a) Deep learning (DL)-based learning models can be used for personalized adaptive education systems. Personalized learning can be leveraged to make this type of education more effective. Personalized learning (also known as competency-based learning) is an educational approach in teaching where students can adjust to their needs and abilities. (Andriana, 2021). The deep learning approach is a learning system designed to strengthen students' understanding with an in-depth approach (Khairiet al., 2023). The deep learning approach emphasizes a learning process that involves critical analysis, relating information to prior knowledge, and being able to apply it in a broader context. The goal is to create reflective learning that is meaningful, fun, critical and more in-depth. Research (Biggset al., 2022) shows that deep learning approaches have been implemented in many countries by showing relevant developments and results in improving the quality of understanding and student engagement levels.

Deep learning aims to make the learning process experienced can have a strong impact and influence on students. The goal is for permanent behavioral changes in students as a result of learning. The value of goodness built in the learning process is expected to manifest in students and carry over into their daily lives, and this is permanent, not just a momentary change. To achieve this, educators must invite students to reflect on the material they teach in class into students' daily lives, and then be guided so that they can apply it into daily behavior. Bahgat interprets the learning process as a journey, not just a process when learning in the classroom. The learning process must not stop only in the classroom, but must be continued with empowering mentoring, so that it can be applied by students in their daily lives. The main goal of deep learning is to create individuals who have deep understanding, critical thinking skills and skills that are relevant to the challenges of the 2nd century. As well as making learning more meaningful, relevant and fun for students by emphasizing awareness, deep understanding, and the application of knowledge in real life. That what must be considered in problem solving is: understanding the problem, planning the solution, solving the problem according to the plan and checking again. Teachers must pay attention to the model of the question and the level of difficulty, as well as the allocation of teaching time, so

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that students feel more challenged but do not cause stress. Many learnings are able to activate students but fail to build a deep connection between students and the learning material. The class is too active but students are not given the opportunity to conclude the important things learned, students are not invited to reflect on what has been learned.

In line with that, Langgulung and Thosin Waskita mentioned that human existence is highly determined by the way he uses his intellect optimally to solve problems (Thosin Waskita et al., 2023). Arifudin added that every human being has innate potential from birth, and optimizing this potential is the key to knowing his or her identity (Rosmayati & Yulianti, 2022). It is in this context that artificial intelligence (AI) has become an important part of the development of the times. This technology has changed the way humans solve complex problems more efficiently. AI, especially deep learning, is a subject that is widely discussed because of its ability to resemble the learning process of the human brain (Apriani, 2024). Deep learning itself is part of AI and machine learning that uses layered neural networks to complete complex tasks such as speech recognition and language translation (Naharuddin & Hanani, 2024; Raup et al., 2022). This network mimics how human neurons work in absorbing information gradually (Primartha, 2018). The application of AI in education has brought significant changes, including in curriculum design, learning methods, and evaluation systems (Nasir, 2022; Nasir et al., 2022). In the context of Islamic education, AI technology provides opportunities to improve the quality of learning that is in line with spiritual and moral values sourced from the Qur'an and Hadith (Fadilah, 2024). The Qur'an explicitly encourages Muslims to continue to study and utilize their potential for the benefit of the ummah. Therefore, technology should be a tool in achieving the goal of holistic Islamic education, which is to develop intellectual, spiritual, and social aspects in a balanced manner (Ulfah et al., 2022).

Based on this description, an important question arises to be further researched: "How can the implementation of deep learning (deep learning) of quality and conceptual understanding-oriented learning support at SMA PGRI Pekanbaru?" This question is important to answer so that the integration of modern technology such as deep learning not only improves the quality of learning, but also remains in line with the principles and mission of Islamic education which is oriented towards the formation of character, faith, and noble morals.

Implementation of Deep Learning is quality learning and oriented to conceptual understanding in teachers at SMA PGRI Pekanbaru so that every teacher must be able or encourage students to explore, connect concepts and build knowledge in a meaningful way. However, there is a fairly clear research gap in the literature: there are still few studies that specifically examine the use of the implementation of deep learning in learning and are oriented towards conceptual understanding at SMA PGRI Pekannaru. In fact, this technology has great potential to create an evaluation system that is more personalized, objective, and in accordance with the needs of individual students.

METHOD

The research methodology used in this study is designed to provide an in-depth understanding of the implementation of deep learning (deep learning) of quality and in-depth conceptual understanding at SMA PGRI Pekanbaru. This study uses a qualitative approach with a case study design (E Haryono et al., 2023) to understand the application of deep learning concepts in quality education strategies.

The data sources consisted of teachers, as well as students involved in deep learning-based learning, selected through purposive sampling. In addition, curriculum documents, syllabus, and learning evaluation results are used as secondary data sources (Haryono Eko Rangkuti Rizki Kurniawan, Sariman, 2024).

Data were collected through in-depth interviews, participatory observation, (Sariman, Haryono, Wahyudin & Muttaqin, 2024) and document analysis. The interview was conducted to explore the experiences and perceptions of informants regarding the implementation of

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quality and conceptual understanding deep learning at SMA PGRI Pekanbaru, while participatory observation was used to observe the implementation of this method in schools. Document analysis is carried out on the curriculum and learning outcomes to assess its impact on student understanding.

With this research methodology, the research is expected to provide a comprehensive and in-depth overview of the concept of deep learning in schools, as well as formulate applicable and relevant recommendations for the implementation of deep learning for quality learning and oriented towards deep conceptual understanding, especially at SMA PGRI Pekanbaru.

FINDINGS AND DISCUSSION

The results of this study show that the concept of deep learning has been applied at SMA PGRI Pekanbaru, with various learning strategies. The principle of applying deep learning consists of: a. a. awareness, which is the experience of students obtained when they have the awareness to become active learners and are able to regulate themselves. Students understand learning objectives, are intrinsically motivated to learn, and actively develop learning strategies to achieve goals. The benefits of being aware are Reducing Stress and Anxiety, Improving Focus and Concentration, Improving Sleep Quality, Increasing Self-Awareness, Improving Emotional Well-Being b. Meaningful is that learners can feel the benefits and relevance of the things learned for life. Students are able to construct new knowledge based on old knowledge and apply their knowledge in real life. c. Encouraging, i.e. exhilarating learning is a positive, fun, challenging and motivating learning atmosphere. Students feel appreciated for their involvement and contribution to the learning process. Students are emotionally connected, making it easier to understand, remember and apply knowledge.

The learning experience with the understanding method that is carried out in stages to reach the level of Deep Learning (PM) consists of: a. essential knowledge, namely material or subjects that must be mastered and understood by students, and becomes the foundation for further learning. Example: Language (Vocabulary, basic grammar, discourse knowledge, and four language skills). Basic knowledge that is fundamental in a field or discipline, which must be understood and mastered in order to build a more complex understanding that can be applied in various contexts. b. Applicative Knowledge, which is application-oriented knowledge in real or practical situations. Knowledge that focuses on applying concepts, theories, or skills in real-life situations. This knowledge is used to solve problems, make decisions, or create something impactful. Example: Language (Understanding how to use writing skills to create effective reports or presentation materials) c. Knowledge of Values and Character are three interrelated concepts, especially in the context of education and individual development. Knowledge related to understanding moral, ethical, cultural, and humanitarian values that play an important role in shaping a person's personality, attitudes, and behaviors Examples: Language (Understanding how to use language to build good relationships, avoid conflicts, and show empathy and care). Knowledge refers to the understanding and information that a person has. Values are principles that are believed in and used as a guideline in action. Character is a moral and ethical quality that is reflected in a person's behavior. Character education aims to form individuals who are not only academically intelligent, but also have good morals and ethics. Knowledge, values, and character are three interrelated and important things in forming a qualified individual. Character education plays an important role in shaping individuals with good knowledge, values, and character, which will ultimately contribute to the progress of the nation. That the initial stage for students to actively construct knowledge in order to be able to understand concepts or materials from various sources and contexts in depth. Knowledge in this phase consists of essential knowledge, applicative knowledge and knowledge of value and character. For example, exploring students' experiences of social problems in society before conveying the topic of

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social problems in social studies learning, providing poverty data in Indonesia and asking students to understand and provide responses.

The learning experience with the application method which is carried out in stages to reach the level of Deep Learning (PM) consists of deepening knowledge. That learning experiences that show the activities of students apply knowledge in life contextually. Knowledge gained by students through knowledge deepening. Expand or develop an understanding of a concept by connecting it to a new situation, other experience, or a different field of knowledge. Topic: Linear Equations • Basic: Learners understand the general forms of linear equations and how to solve them. • Deepening of Knowledge: Learners apply linear equations in financial problems, such as calculating business profits or determining breakeven points in product sales.

The learning experience with the reflection method is carried out gradually to reach the level of Deep Learning (PM) consisting of self-regulation. The process by which students evaluate and interpret the process and results of the real actions or practices that they have done. The reflection stage involves self-regulation as an individual's ability to manage their learning process independently, including planning, implementing, supervising and evaluating their learning methods. Individuals are able to control their thoughts, emotions, and behaviors in achieving certain goals. In the context of education, self-regulation is very important for students to manage their learning process independently and effectively. For example, conveying learning motivation according to the experience gained, self-assessment of the achievement of learning objectives, students can make a summary of the material understood to test their own understanding, students are able to control negative emotions such as anxiety, stress, and frustration when learning with coping strategies such as deep breathing, taking a break, or seeking social support, and others. Deep learning consists of:

> *Thinking is an educational process that focuses on sharpening intellect and cognitive abilities, such as the ability to understand, analyze, and solve problems.*
>
> *Taste processing is an educational process that aims to develop aesthetic sensitivity, empathy and the ability to appreciate beauty and human relationships.*
>
> *Heart training is an educational process to hone inner sensitivity, form ethics, and instill moral and spiritual values.*
>
> *Sport is part of education which aims to maintain and improve physical health, body strength, and character formation through physical activities.*

The Deep Learning Framework is:

> *Pedagogical Practice The teaching strategy chosen by the teacher to achieve the learning goals in achieving the dimension of the graduate profile. To realize deep learning, teachers focus on authentic student learning experiences, prioritizing real practice, encouraging high-level thinking skills and collaboration. For example: Inquiry-Based Learning, Project-Based Learning, Problem-Based Learning, Collaborative Learning, STEM (Science, Technology, Engineering, Mathematic) Learning, Differentiated Learning, and so on. Discussions, concept maps, advance organizers, group work, and so on.*
>
> *Learning Partnerships Learning partnerships form dynamic relationships between teachers, learners, parents, communities, and professional partners. This approach moves learning control from the teacher alone to joint collaboration. For example, School Environment: Principals, school supervisors, teachers, and students, and others. Outside School Environment: MGMP, Professional Partners, Business World, Industrial World, and World of Work, Educational Institutions/Institutions, Media, and others. Community: Parents, Communities, Community Leaders, Religious and/or Cultural Organizations, and others.*

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Learning Environment The learning environment emphasizes the integration between physical space, virtual space, and learning culture to support deep learning. Physical and virtual spaces are designed flexibly as a place that encourages collaboration, reflection, exploration, and sharing of ideas, so that it can optimally accommodate various learning styles of students. A learning culture that is developed to create a safe, comfortable, and mutually respectful learning climate for conducive, interactive, and motivating students to explore, express, and collaborate. Optimizing physical space as a process of direct interaction in creating a conducive learning atmosphere, increasing comfort, and supporting PM such as classrooms, laboratories, counseling rooms, school environments, libraries, environment/environment, art rooms, skills practice rooms, worship rooms, halls/auditoriums, museums, and others. The use of virtual spaces for interaction, knowledge transfer, learning assessment without the limitations of physical space, such as online learning design, online/hybrid learning platforms, and online assessments, among others.

Digital Utilization The use of digital technology also plays an important role as a catalyst to create more interactive, collaborative, and contextual learning. The availability of a variety of learning resources is an opportunity to create meaningful knowledge for students. For example, Learning Planning: designing and managing digital classrooms, project-based learning planning management), design of visual and infographic teaching materials, creation of interactive content such as quizzes and simulations, utilization of artificial intelligence, and instructional design applications, and other learning planning. Learning Implementation: synchronous learning, online collaboration, asynchronous learning, learning resource pages, digital libraries, use of artificial intelligence, educational videos, interactive multimedia, simulation and animation, gamification and quizzes, and other resources. Learning Assessment: creation of automated tests, evaluation of originality and quality of writing, interactive-based formative tests, utilization of artificial intelligence, management of digital portfolios, and so on.

The Role of Teachers in Deep Learning is:

Activators, Teachers stimulate learners to achieve learning objectives and learning success criteria with various strategies and provide feedback to stimulate each higher level of achievement.

Collaborators, teachers build collaborative inquiry with students, peers, families, communities, professional partners and DUDIKA, in other partners in developing and sharing real experiences in the implementation of PM.

Teacher Learning Culture Developers provide trust and risk-taking opportunities to students to develop creativity and innovate, and involve students in developing learning experiences, as well as creating a learning environment that supports PM.

The implementation of Deep Learning is:

PM Planning Planning through teachers' reflections on themselves, student characteristics, subject matter, resources and learning partners

Implementation of learning with the principle of awareness, meaningful, and encouraging through learning experiences to understand, reflect

Assessment Assessments focus not only on mastery of theory, but also on deep conceptual understanding, critical thinking skills, and real-life application

The implementation of Deep Learning is:

Delivery of material according to the stages of thinking of students to support the achievement of depth of understanding of students' concepts

Existing learning models or strategies can be used with the principle of conscious, meaningful, and encouraging learning

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The application of meaningful learning with the use of the surrounding environment, such as the use of the school environment, the surrounding natural environment, the social environment, and so on

The principle of conscious, meaningful, and encouraging learning can be in several learning activities that do not have to be sequential and/or simultaneous

The learning experience of understanding, applying, and reflecting is carried out with learning steps that are in accordance with the learning context and conditions, as well as teacher innovation

Syntax/Learning steps in existing learning models or strategies can be adapted according to the experience of learning to understand, apply and reflect

The learning experience of understanding, applying and reflecting is carried out in several learning steps whose implementation is adjusted to the context and learning conditions

The experience of learning through thinking, heart, taste, and exercise is a holistic and integrative self-development that includes intellectual, socio-emotional, spiritual, and physical aspects. So that learning produces individuals who have complete and balanced competencies according to their nature

Learning topics are associated with cross-knowledge (multi/inter-disciplinary) or related to the field of science or subject that students are studying

The application of deep learning is adjusted to the characteristics of each subject

Partnerships involving various parties both in the school environment, outside the school, and the community to support deep learning

The learning environment is created as an integration of physical space, virtual space and learning culture to support deep learning

The use of digital technology will strengthen deep learning in learning planning, implementation, and assessment

Assessment uses assessment as learning, assessment for learning, assessment of learning. PM emphasises the importance of authentic feedback and assessment

Examples of PM Implementation in Subjects are:

Language, Learning that develops communication skills, text comprehension, critical thinking, expression of ideas, and cultural understanding, for example: Inquiry-Based Learning which provides opportunities for students to explore language by collecting, processing and evaluating information related to social problems in society to gain new knowledge.

Science, Learning that focuses on understanding the universe, natural phenomena, and scientific principles to develop knowledge, scientific thinking skills, scientific work, and attitudes of caring for the environment, for example: Project-Based Learning by providing experience to students to create renewable energy projects to overcome environmental problems.

Social Sciences, Learning that emphasizes social life, human interaction, and community dynamics to form national insight and critical thinking skills, e.g.: Contextual Learning by comparing the values and problems of the modern market and the traditional market from a social and economic perspective and providing solutions to these problems.

Examples of Deep Learning are:

Student Identification, Students have varied basic knowledge regarding environmental issues, need to have awareness of their role in the balance of the ecosystem, show high interest in project-based activities.

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Identify Subject Matter, Ecosystem materials can include factual, conceptual, procedural, and metacognitive knowledge. This material is designed to be relevant to real life, such as understanding the impact of human activities on river ecosystems, as well as applicable through activities such as waste management projects.

Dimensions of Graduate Profiles, Faith and Piety towards God Almighty, Creativity, Health, Citizenship, Collaboration, Communication, Critical Reasoning, Independence.

Student Learning Outcomes, investigating how the interdependence relationship between biotic-abiotic components can affect the stability of an ecosystem in the surrounding environment.

Learning Topics, The Role of Humans in Maintaining Ecosystems.

Learning Objectives, Students are able to: understand the importance of biodiversity in ecosystems, identify the impact of human activities on ecosystem balance, implement creative projects based on environmental solutions to prevent pollution in the ecosystem.

Pedagogical Practice, Project-based learning, group discussions, field exploration, interviews and presentations.

Learning Partners, Ciliwung Care Community (KPC), Ciliwung River Waste Bank Manager, Community around Ciliwung River.

Learning environment, Physical space; the environment around the Ciliwung River. Virtual Spaces; an online platform for discussion with friends. Learning culture; collaborative, actively participating, and curious.

Digital Utilization, LMS Planning, Implementation; online meetings, videos, online libraries, Assessments; Online Assessment.

Examples of Implementation in Deep Learning are:

The PM approach in SMA/MA can develop more analytical, reflective, and applicative thinking in various life and academic contexts. High school is a stage of transition to higher education, so learning is not only about understanding concepts, but also developing high-level thinking skills, problem-solving, and cross-disciplinary knowledge synthesis.

PM's approach to vocational schools/MAK is oriented towards practical skills, industrial application, and job readiness or entrepreneurship, so that PM facilitates students not only to understand theory, but also to be able to master technical skills and think critically in the context of the world of work and industry.

The Principles of Deep Learning Assessment emphasize the importance of authentic feedback and assessment that includes the following three assessment functions:

Assessment as Learning

Assessment for reflection on the learning process and self-reflection of students. Examples: Reflective journals, self-assessments, peer assessments, learning progress checklists, and others.

Assessment for Learning

Assessments for learning process improvement serve as feedback to help students understand their learning progress, as well as the reflection of the teaching teacher. Examples: Concept maps, formative feedback, observations, diagnostic questions, and more.

Assessment of Learning

Assessment to measure students' learning outcomes at the end of learning. Examples: Oral tests, written tests, reports, project assessments, portfolios, and more.

Deep Learning Towards Quality Education for All, namely:

Honoring each individual. Valuing students' uniqueness, potential, and learning experiences by creating an inclusive environment that supports growth.

Learning Transformation. Realizing an education, that is aware, meaningful, and encouraging to optimally improve the competence of students.

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Holistic Approach. Developing students as a whole through thinking, heart, feeling, and sports so that they are ready to face life's challenges.
Education Ecosystem Collaboration. The success of deep learning requires synergy between teachers, students, parents, the community, and educational partners.
Education of the Future. Utilizing digital technology to create more interactive and flexible learning, as well as preparing a superior generation with character.

Thus, the results of Jusman et al.'s (2025) research emphasize that deep learning in religious education is an important strategy to answer moral and spiritual challenges that arise due to the development of artificial intelligence technology. Curriculum innovation like this is in line with the direction of an impactful curriculum that is oriented towards the formation of religious character and transformative understanding, while preparing the young generation who are able to adapt and still hold on to values in the midst of changing times.

Thus, it can be concluded that the challenge of implementing deep learning is not solely on teachers or teaching methods, but is a systemic problem that requires a cross-level approach: starting from adaptive policy formulation, teacher training based on reflective practices, to strengthening structural support in the school environment that supports active and transformative participation. Without this support, the Independent Curriculum risks not being able to achieve its main goal, which is to create meaningful, relevant and impactful learning for students in the 21st century. So overall, the results of the researcher show that the success of the implementation of deep learning is highly dependent on the pedagogical capacity of teachers, the support of school management, and the existence of a consistent reflective learning culture.

CONCLUSION

The results of the study show that the implementation of deep learning in conceptual comprehension-oriented learning is able to help students and students understand the material more comprehensively compared to surface learning which tends to be oriented towards memorization. However, the challenges faced in the future are the readiness of educators to adapt this method and the limitations of the technological infrastructure that supports exploration-based learning. These findings support the theory of constructivism put forward by Piaget (1972) and Vygotsky (1978), which emphasizes that effective learning occurs when individuals actively build knowledge through interaction with the environment, as well as in line with Biggs' (1999) constructive alignment approach that emphasizes alignment between goals, methods, and assessments. Rahmawati's research (2017) in the Journal of Education and Technology corroborates that the integration of deep learning in the curriculum allows students to understand concepts more deeply through contextual learning experiences, while the results of the study show that students and students who participate in deep learning-based learning are better able to connect concepts between disciplines and have higher creativity in completing academic tasks. These findings are consistent with the theory of Bloom's Taxonomy (Bloom, 1956), which asserts that analysis, evaluation, and creation oriented learning is more effective in improving higher-level thinking skills (HOTS), as confirmed by Lestari's (2021) research in the Journal of Higher Education. However, significant barriers remain, including resource limitations, administrative burdens, and unsynchronized assessment systems, exacerbated by weak structural support for participatory and reflective learning transformation. Therefore, it is necessary to strengthen the capacity of teachers through contextual and continuous training, reform of the assessment system, and institutional commitment to build a learning ecosystem that supports comprehensive deep learning. If these steps are carried out consistently and collaboratively, then deep learning has great potential to increase the effectiveness of the Independent Curriculum and form students who are not only cognitively intelligent, but also reflective, critical, and characterful.

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Based on the results of the research and discussion, it can be concluded that the implementation of deep learning of quality learning and oriented to conceptual understanding can improve the quality of education, critical thinking skills, and problem-solving skills among students and students. The integration of deep learning in the Education curriculum shows that this approach not only improves academic outcomes, but also forms a more analytical and innovative mindset. The implementation of this method in several educational institutions proves that exploration-based learning and direct experience is able to produce more meaningful understanding compared to surface learning methods that are oriented towards memorization alone.

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