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Innovation in the Field of Learning: Deep Learning Approach and Its Application in Learning at Hayat School Bandung City

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Abstrak

Perkembangan teknologi yang pesat di era digital menuntut dunia pendidikan untuk beradaptasi dalam menciptakan model pembelajaran yang kontekstual, personal, dan bermakna. Salah satu pendekatan yang relevan dalam menghadapi tantangan ini adalah *Deep Learning*, yang mengintegrasikan kecerdasan buatan dengan pendekatan pedagogis berbasis pengalaman. Penelitian ini bertujuan untuk mengkaji implementasi pendekatan *Deep Learning* dalam proses pembelajaran di Hayat School Bandung *SCM* (*School of Creative Minds*), serta dampaknya terhadap pengembangan kompetensi abad ke-21 dan karakter peserta didik. Penelitian ini menggunakan metode kualitatif deskriptif dengan teknik observasi, dokumentasi, dan wawancara terhadap pendidik, peserta didik, dan orang tua peserta didik serta analisis kurikulum dan fasilitas pendukung di Hayat School. Data dianalisis secara induktif untuk mengungkap makna dan praktik transformatif dalam pembelajaran. Hasil penelitian menunjukkan bahwa pendekatan *Deep Learning* diterapkan melalui pembelajaran kontekstual, refleksi aktif, diskusi bermakna, pembelajaran berbasis proyek (*PjBL*), serta kurikulum yang dipersonalisasi. Guru atau pendidik berperan sebagai fasilitator atau *Kakak Fasil* yang mendorong eksplorasi dan kesadaran diri siswa. Pendekatan ini efektif dalam meningkatkan keterampilan berpikir kritis, empati sosial, serta spiritualitas peserta didik. Pembahasan menegaskan bahwa keberhasilan pendekatan ini ditunjang oleh kurikulum berbasis tauhidullah dan fasilitas pembelajaran yang inklusif. Kesimpulannya, *Deep Learning* di Hayat School tidak hanya meningkatkan kualitas akademik, tetapi juga membentuk manusia utuh yang siap menghadapi tantangan masa depan dengan internalisasi nilai-nilai Islam yang kuat.

Kata kunci: Deep Learning, Pendidikan Islam, Pembelajaran Kontekstual, Project Based Learning, Kurikulum Personal, Hayat School

Abstrack

The rapid advancement of technology in the digital era demands that the field of education adapt by creating learning models that are contextual, personalized, and meaningful. One relevant approach to addressing this challenge is Deep Learning, which integrates artificial intelligence with experiential, pedagogy-based methods. This study aims to examine the implementation of the Deep Learning approach in the learning process at Hayat School Bandung SCM (School of Creative Minds) and its impact on the development of 21st-century competencies and student character. The research employs a descriptive qualitative method using techniques such as observation, documentation, and interviews with educators, students, and parents, alongside an analysis of the curriculum and supporting facilities at Hayat School. Data were analyzed inductively to uncover the meanings and transformative practices within the learning process. The findings reveal that the Deep Learning approach is applied through contextual learning, active reflection, meaningful discussions, project-based learning (PjBL), and a personalized curriculum. Teachers, referred to as "Kakak Fasil" (Facilitator Siblings), serve as facilitators

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who encourage student exploration and self-awareness. This approach proves effective in enhancing critical thinking skills, social empathy, and student spirituality. The discussion highlights that a tauhidullah-based curriculum and inclusive learning facilities support the success of this approach. In conclusion, Deep Learning at Hayat School not only improves academic quality but also shapes holistic individuals who are prepared to face future challenges with a strong internalization of Islamic values.

Keywords: Deep Learning, Islamic Education, Contextual Learning, Project-Based Learning, Personalized Curriculum, Hayat School

INTRODUCTION

In the era of globalization, which cannot be separated from technology, for most people, especially those in urban and rural areas, utilizing technology is inseparable. The rampant use of technology can be interpreted as a sign of progress in a country. A country is said to be advanced if its population uses technology and follows its development to achieve high technology. (Fullan et al., 2018; Nasution, 2017) (Robby Darwis Nasution, 2017). Technology will continue to advance alongside the rapid development of science, especially in the field of technology. Thus, education will continue to develop and advance to educate the next generation. The benefits of technology include facilitating human activities at work, helping humans with every heavy or light job. (Nasser et al., 2021).

Technological progress is a gift from Allah SWT given to humans. With the power of reason, humans can create various goods and technologies that are useful for the public, provided they have the permission of Allah SWT. The potential of reason is a remarkable gift entrusted by the Creator to humans, giving them an advantage over other creatures. Ideally, humans use their intellect and intelligence to do something helpful from time to time.

Indeed, in the creation of the heavens and the earth, the alternation of night and day, the ships that sail in the sea with the goods that are useful to man, that which Allah sent down from the heavens in the form of water, and with it He gave life to the earth after it died, and He scattered in it various beasts, and the range of the winds and clouds that are controlled between the heavens and the earth, (all of them) are true, are signs (of Allah's greatness) for those who understand (Al-Baqarah/2:164) (Al-Qur'an, 2019).

From the above verse, it is very clear that Allah SWT created the heavens and the earth and all their contents, and humans with a mind accompanied by gratitude to Allah SWT, are expected to be able to manage the natural resources on earth for the benefit of the people and the country. Langgulung (in Suminto) states that humans exist because of the existence of their

intellect, where in intellect there is an extraordinary potential to think and decide, and think in determining a choice or to make a decision in solving a series of problems (Fadlillah et al., 2023)(Suminto, 2020). Therefore, the existence of a human being is determined by the health of his intellect, which is used correctly and adequately. Kitta & Salim argue that every individual has potential inherent from birth, and they can optimize it (Kitta & Salim, 2022).

In general, the progress or decline of a nation, group, or individual is greatly influenced by human intellect, which constantly makes breakthroughs, innovates, and makes choices for greater benefit. In recent years, artificial intelligence has grown and developed very quickly. Often, even challenging human problems can be solved quickly and easily with the help of artificial intelligence. Artificial intelligence is so interesting because it can be deepened, discussed, and applied, with its advantages resembling the neural network of the human brain. The term artificial intelligence has become increasingly popular and widely studied by intellectuals during President Jokowi's leadership because it proposes to replace civil servants/ASN Echelon 3 and 4 with artificial intelligence.

Artificial intelligence is divided into two parts, namely, Deep Learning and Machine Learning, but in this study, the author limits the discussion to Deep Learning. Artificial intelligence is a sign of the times, marking the transition to the digital age, where technology plays a crucial role in encompassing all levels of human beings in their lives. (Pramana et al., 2022). The role of Artificial Intelligence (AI) technology is becoming increasingly unstoppable in various sectors, such as education. The existence of AI in the realm of education is beneficial and facilitates the transformation of the educational curriculum, as well as the sectors of science, technology, mathematics, and engineering. AI is also likely to transform education in a more advanced direction overall. The growth of AI technology is driven by the need for educators to improve education, not only in teaching methods and curriculum but also in the smallest details. Thus, AI technology is urgently needed to help the education sector.

Education in times of disruption urgently requires the role of technology to facilitate its application (Natalia & Muhtarom, 2024). Models and methods of learning using AI technology tools will continue to evolve in the form of fiction or fantasy, which can later become real things. Likewise, it has been proven that many educational services are accompanied by advances and developments in AI technology, which are familiar in daily use, especially in the world of education. This aligns with what Ridayani et al. conveyed: teachers in this modern era must be ready to follow technological developments, especially in the development of the learning and teaching curriculum (Ridayani et al., 2021). Therefore, its derivative, Deep

Learning, is a part of artificial intelligence, involving the development of multiple-layer neural networks to perform tasks such as object detection, voice recognition, language translation, and more (Raup et al., 2022).

Deep Learning is a learning method that utilizes multi-layered artificial neural networks. (Abiodun et al., 2018; Ahmed et al., 2023; Chakraborty et al., 2024; X. Zhang et al., 2023). This artificial neural network is made to resemble the human brain, where neurons are connected to form a very complex network. Deep Learning, or deep structured learning, is a learning method that utilizes multiple non-linear transformations. Deep learning can be seen as a combination of machine learning and AI. (Primartha, 2018).

Meanwhile, Islamic education has a firm foundation as a guide for life, namely the Qur'an and Al Hadith. These texts, in principle, encourage their people to constantly develop and advance in a better and more useful direction, making good use of all natural resources and others based on Islamic values. According to Supriani, the existence of technological advances should motivate educators, especially Islamic educators, to strive to produce graduates who exhibit excellence, possess competitive abilities, and provide broad benefits to the wider community.

Previous studies have widely examined the use of AI in education. (Pramana et al., 2022; Ridayani et al., 2021), including its ability to support curriculum transformation and enhance learning outcomes. However, there is still limited research that integrates AI, specifically Deep Learning, with the principles of Islamic education and character building based on the Qur'an and Al-Hadith. (Robaeah et al., 2023). Most existing studies focus on the technical implementation of AI tools or their impact on general education systems without addressing the ethical, spiritual, and value-based perspectives that are crucial in Islamic education. (Kitta & Salim, 2022; Ulfah et al., 2022).

In addition, it is important to clarify that the concept of deep learning discussed in this study is not limited to artificial intelligence (AI) but also refers to a pedagogical approach that prioritizes meaningful learning, mindful learning, and joyful learning. (Prihantoro et al., 2025). This interpretation of deep learning focuses on creating a holistic, engaging, and value-driven learning experience, enabling students to connect knowledge with real-life contexts, reflect on their learning process, and experience joy in acquiring new understanding. (Fullan et al., 2018). By emphasizing these three principles, deep learning in this study moves beyond a purely technical AI perspective and becomes a transformative educational strategy that aligns with Islamic values and character building.

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This study aims to fill this gap by exploring how Deep Learning technology can be harmonized with the values of Islamic education, particularly in forming graduates who are not only technologically literate but also have noble character (akhlaq karimah) (Martiadi et al., 2025). The novelty of this research lies in its interdisciplinary approach that combines cutting-edge AI applications with a value-based educational framework derived from Islamic principles. This approach emphasizes that technological advancements should be leveraged responsibly to support spiritual, moral, and intellectual development in line with Islamic teachings. (T. M. Nasir et al., 2024; T. M. H. Nasir, 2023; Suhendi et al., 2025).

METHOD

This study uses a qualitative research methodology. Research methodology is a research implementation strategy consisting of stages based on general hypotheses, which serve as the basis for choosing an approach in collecting, analyzing, and interpreting data. The purpose of the research procedure, according to Sugiyono, is to define, prove, develop, and explain knowledge and theories to understand, overcome, and predict problems arising in human life. (Okpatrioka, 2023; Waruwu, 2023). Meanwhile, Heri Rahyubi's study methodology can be applied in teaching and learning activities to facilitate a good learning process. (Arianto, 2022; Imron et al., 2020; Jamila et al., 2021).

In this approach, the researcher serves as an important instrument, using a data collection tool to conduct research in natural object situations (as opposed to experiments). This method combines triangulation, inductive/qualitative data analysis, and emphasizes meaning over generalization in qualitative research findings. (Fadli, 2021). A key tenet of the qualitative research tradition, unique to the social sciences, is to observe people in their own environment and communicate with them using their own terms and language. (Bakry, 2017).

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RESULT AND DISCUSSION

Contextual and Real-Experiences Based Learning

Figure 1: Innovation Discussion Activities in the Al-Hayat School Field

Hayat School was established in 2016 and, in 2023, transformed into SCM (School of Creative Minds), implementing the Deep Learning approach as the primary foundation in the educational process. This school is located at Jalan Cikoang No. 48, Cigending, Kec. The available education levels are pre-school, Elementary, Junior High, and high school. Based on the author's interview with Mrs. Rahmawati, M. Pd., on Wednesday, April 16, 2025, it was found that this school is generally different from others. One of them is related to school uniforms; students at this school dress freely (but politely), except during sports and outing activities. The curriculum is personality-based, aiming to develop students' potential according to their nature. The role of parents of students is ideal; their commitment to the school is evident when they register their children. According to the parents of several students met by the author, they felt grateful to be part of Hayat School because, as he mentioned, not only were their sons and daughters taught, but they also gained a lot of knowledge and experience. In several mandatory parenting programs, parental involvement has fostered good collaboration, especially in supporting school programs that will be continued at home. On that occasion, the author also participated in a study tour planning meeting in one of the villages in Jogjakarta. The design was created by 7th and 8th-grade junior high school students, covering everything from making proposals and presentations to the technical implementation of the study tour.

Hayat School has been registered and has an operational permit from the Bandung City Education Office, allowing its graduates to continue to higher levels, both public and private, at home and abroad. According to the information obtained, many high school graduates of this school are accepted into well-known universities both domestically and internationally. One of the important pillars of this approach in this school is contextual and experiential learning. Students not only learn from textbooks or abstract theories, but are actively invited to relate the subject matter to their daily lives, social realities, and the environment around them.

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The implementation of this contextual learning is reflected in the design of hands-on learning activities in almost all subjects. For example, in Science lessons, students not only take notes on formulas or memorize concepts, but also conduct simple experiments to observe natural phenomena firsthand. In social studies or Indonesian lessons, students are invited to observe the environment, make proposals, reports, or discuss emerging social issues. This kind of learning encourages students' emotional and intellectual engagement because they feel the material is relevant to their real lives.

This learning practice not only increases students' absorption of the material but also fosters curiosity, social empathy, and problem-solving skills. Students are trained to think critically about the situations they experience firsthand, and not just passively absorb information. Therefore, this approach is in line with the theory of constructivism, which states that knowledge is built through active experience and interaction with the environment. Teachers act as facilitators who guide the exploration process, not as the sole source of information.

Furthermore, the contextual learning model applied at Hayat School also helps students develop the transfer of learning, i.e., the ability to apply knowledge and skills acquired in the classroom to new and diverse situations. Thus, learning is not only oriented towards short-term academic achievement but also forms long-term competencies relevant to real life. This reflects a 21st-century educational philosophy that emphasizes the interconnectedness between school and the social life of the community.

Overall, the contextual and real-life experiential learning at Hayat School has created a vibrant, dynamic, and transformative learning environment. Students are not just recipients of information, but active actors in building knowledge and values. To strengthen this deep learning approach, Hayat integrates the principles of meaningful learning (connecting lessons to life experiences), mindful learning (developing reflective awareness), and joyful learning (creating enjoyable and emotionally engaging activities), making the entire learning process holistic and value-driven.

Active Reflection and the Role of Teachers as Facilitators

One of the prominent pedagogical innovations at Hayat School (SCM) is the implementation of active reflection as an integral part of the daily learning process. This reflection is not formal or rigidly structured; instead, it is facilitated naturally and dialogically at the end of each learning session. In practice, students are invited to evaluate and reflect on what they have learned that day, how they have processed the material, and how the learning impacts their self-understanding, attitudes, and relationships with the social environment. This moment of reflection becomes a safe and open space for students to speak honestly about their learning experiences.

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Reflection is carried out not only to measure cognitive achievement, but also to explore affective and metacognitive aspects. For example, students may say that they feel challenged during discussions, or that they realize the importance of listening to a friend's opinion. Thus, this reflection process strengthens the ability to think about thinking, or so-called metacognition. This approach is crucial for developing students' character and personality because they learn to recognize emotions, learning processes, and values absorbed indirectly through learning activities.

In this context, the role of teachers in Hayat has undergone a significant shift from the traditional model. The teacher is no longer positioned as a center of knowledge or a single instructor, but as a facilitator who guides exploration, stimulates questions, and provides space for critical and reflective thinking. In Hayat, teachers are culturally referred to as Brother Fasil, reflecting a more egalitarian, close, and friendly approach. This shows the transformation of the teacher's role from instructor to learning partner, who values student experience as part of the learning process.

This facilitator not only plays a role during learning, but also becomes a companion when students face dilemmas, confusion, or want to explore ideas further. They facilitate discussions with open-ended questions, such as "What did you learn the most today?", "How did you feel during the discussion?", or "What would you like to change tomorrow?". These kinds of questions aim to foster self-awareness, empathy, and responsibility in the learning process of students, which ultimately strengthens their character formation and social-emotional competencies.

The existence of active reflection guided by Brother Fasil also strengthens the humanist and dialogical learning climate. Students feel listened to, valued, and given space to be themselves. This climate encourages more authentic participation in the learning process and builds trust between teachers and students as learning partners. By embedding mindful learning principles within these reflective sessions, Hayat ensures that students not only learn content but also develop awareness, purpose, and joy in every step of their learning journey.

Collaboration, Meaningful Discussions, and Strengthening HOTS

One of the key approaches in implementing Deep Learning at Hayat School is the use of collaborative learning, accompanied by strengthening higher-level thinking skills or Higher Order Thinking Skills (HOTS). This approach places collaboration as a medium to build a broader and deeper understanding, through interaction between students in group discussions and joint projects. The goal is not only to find the correct answers academically, but also to develop a way of thinking that is reflective, critical, and open to a variety of perspectives.

In the learning process, students are routinely involved in group discussions facilitated by teachers, or in the context of Hayat called Brother Fasil. Discussions are not only used as a means to

convey opinions, but also to practice listening skills, engage in argument, and build ideas collectively. Teachers design open-ended questions that encourage deeper exploration, such as "Why does this happen?", "What impact does it have on society?", or "What if we look at it from another perspective?"

In line with developing HOTS, students at Hayat School are not only asked to answer factual questions or memorize material. However, they are also trained to analyze various real-world problems, including social phenomena that are close to their lives. For example, when discussing the topic of values and norms in society, students are invited to review the changes in the social behavior of adolescents in the digital era. They are then encouraged to express their personal opinions, supported by arguments based on simple observations or data. This activity not only trains analytical thinking, but also encourages them to consider the ethical dimension and cultural values.

Collaborative projects carried out by students are also a forum for developing high-level thinking skills. In this project, students are given the freedom to choose a theme, formulate research questions, divide roles, and compile the final product, which can be in the form of presentations, social campaigns, educational videos, or findings reports. This kind of project integrates critical thinking, creativity, communication, and social responsibility, so that students are genuinely engaged in a meaningful and applicable learning process.

Through this collaborative learning experience and meaningful discussion, Hayat School has succeeded in forming an educational ecosystem that empowers students as independent thinkers, effective communicators, and highly socially conscious individuals. This is also strengthened by the integration of joyful and meaningful learning elements that ensure deep learning remains engaging, inspiring, and connected to students' real lives.

Project-Based Learning

One of the main pillars in the Deep Learning approach developed at Hayat School is the implementation of Project-Based Learning (PjBL). This learning model is designed to actively involve students in real and contextual projects, ensuring that the learning process occurs not only in the classroom but also integrates with social life and the surrounding environment. With this approach, students are not just recipients of material but also leading actors in the process of exploration, problem solving, and solution creation.

The projects designed by the facilitators at Hayat are diverse and flexible, including activities such as social campaigns, small-scale research, simple experiments, and micro-entrepreneurship projects. In each project, students are invited to experience a complete learning process, starting from formulating trigger questions and developing action plans, to carrying out activities, evaluating

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results, and making improvements based on any failures that occur. This inquiry process encourages the formation of a scientific mindset and a lifelong learner's attitude.

For example, in social campaign projects, students not only learn about social justice and the environment but are also tasked with designing real campaigns, such as creating digital posters, producing short videos, and engaging in social activities within the school or community. This kind of project integrates many cross-field skills, such as digital literacy, communication, teamwork, and social awareness, all of which are highly relevant to the needs of the 21st century.

More than just strengthening the cognitive aspect, the PjBL approach in Hayat also places great emphasis on developing students' character and social-emotional skills. In projects, students are often faced with real challenges such as time constraints, differences of opinion within the team, or failure of experiments. This experience is a means to foster resilience, independence, problem-solving skills, and tenacity in facing obstacles. This process also forms a sense of responsibility, initiative, and concern for the social environment.

Thus, Project-Based Learning is not only an alternative learning method, but has become a core strategy in realizing deep learning at Hayat School. Through these projects, students learn to think and act as productive, solution-oriented, and contributive individuals in society. To avoid deep learning being seen as merely constructivist, Hayat emphasizes meaningful learning (connecting projects to real-life values), mindful learning (encouraging reflective thinking throughout the project stages), and joyful learning (ensuring students enjoy and feel emotionally connected to the projects).

Personal and Value-Based Curriculum of Tauhidullah

Hayat School, now known as SCM (School of Creative Minds), applies a unique and inclusive approach to the curriculum. Institutionally, the school does not explicitly brand itself as an Islamic school. However, all the visions, missions, and core values that constitute the philosophy of education are firmly based on the principles of tauhidullah, human fitrah, and the Islamic worldview. This means that the entire educational process is directed to form a person who knows and acknowledges the oneness of God, lives their human nature, and interprets life through the lens of comprehensive Islamic values.

One of the main advantages that distinguishes Hayat School from conventional schools is the use of a personalized curriculum, which is individually tailored to the unique needs, learning styles, interests, and potentials of each student. In its application, this approach involves an in-depth initial assessment to recognize the learning profile of each student, both cognitively, affectively, and spiritually. The results of the assessment are the basis for developing a learning program that is flexible, dynamic, and relevant to students' real-life development.

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This personalized curriculum approach prevents students from getting stuck in a homogeneous standard that demands all individuals learn in the same way and at the same pace. Instead, students are given space to develop according to their rhythm and characteristics. For example, a student with visual inclination and a high interest in the arts will benefit from visual media-based learning activities, creative projects, and artistic exploration that remain related to the underlying competencies being addressed. In contrast, other students who have an interest in science can be facilitated through experiments, small research projects, and exploration of natural phenomena.

In addition to the academic aspect, the curriculum also explicitly emphasizes the formation of spiritual and moral character. Values such as honesty, responsibility, compassion, and social care are instilled not only through formal lessons but also through daily life, school culture, and the role of facilitators. The principle of tauhidullah becomes the foundation of all activities, instilling in students the belief that learning is part of worship and that every piece of knowledge gained must lead to benefits and contributions to society.

With a curriculum based on personalization and monotheistic values, Hayat School forms an educational ecosystem that is oriented not only towards academic achievement but also towards the intellectual, emotional, social, and spiritual growth and development of students as a whole. This curriculum integrates meaningful learning (ensuring lessons are connected to values and life purposes), mindful learning (building spiritual and moral awareness in every process), and joyful learning (making learning experiences enjoyable and spiritually fulfilling).

Institutional Supporting Facilities and Inclusivity

Since its first establishment in 2016, Hayat School has shown significant developments in terms of vision, educational approach, and institutional capacity. Initially present as an educational unit at the junior high and high school levels, this institution was then rebranded in 2023 to SCM (School of Creative Minds). This rebranding is not just a name change; it reflects a new direction that is more inclusive, adaptive, and contextual in responding to the challenges of 21st-century education, without losing its strong spiritual identity.

One concrete form of this commitment to inclusivity is the provision of a semi-boarding school facility called Hayat-Inn. This facility is intended for students from outside the city of Bandung, allowing them to live and study in a safe, comfortable, and socially and spiritually supportive environment. Hayat-Inn not only provides a place to live but also serves as a space for character development outside school hours, offering mentoring activities that are structured and based on Islamic values and human nature.

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Other supporting facilities are also designed to holistically strengthen the student learning experience. For example, flexible and activity-based classrooms, mini laboratories for scientific experiments, creative studios for art and digital media, and quiet and comfortable spaces for reflection and spirituality. All of these facilities are aimed not only at improving learning effectiveness but also at supporting the process of internalizing values, exploring talents, and enhancing students' emotional well-being.

Furthermore, inclusivity at Hayat School is not only manifested in the form of physical facilities, but also in institutional attitudes and systems. The school is open to students from diverse social, cultural, and geographic backgrounds and employs a learning approach that accommodates various learning styles and special needs. Hayat does not brainstorm students in a single standard, but seeks to create a system that humanizes the educational process by adjusting to the real conditions of students. This inclusivity is an integral part of the philosophy of Life education, which is based on monotheism and human nature.

This systemic approach emphasizes that meaningful education cannot stand alone in the classroom. There needs to be a strong supporting ecosystem, including facilities, student services, and a conducive school climate. By embedding meaningful learning (through relevant facilities and programs), mindful learning (through reflective spaces and character mentoring), and joyful learning (through creative, flexible, and student-friendly environments), Hayat ensures that deep learning is fully integrated and transformative.

Figure 2: Innovation Activities in the Al-Hayat School Field.

Source : https://hayat.sch.id/sd-hayat-school/

This study emphasizes that the application of the Deep Learning approach at Hayat School is closely linked to the three principles of transformative pedagogy: meaningful learning, mindful

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learning, and joyful learning (Andayanie et al., 2025; Fullan et al., 2018; Prihantoro et al., 2025). Through meaningful learning, students connect classroom concepts with real-life contexts; through mindful learning, they develop reflective awareness of their thoughts, emotions, and values; and through joyful learning, they experience motivation and enjoyment that sustain active participation. These principles serve as the framework for analyzing the innovations, processes, and outcomes of the learning practices implemented at Hayat School.

Contextual and Real Experiences-Based Learning

Hayat School applies a contextual learning approach, which emphasizes the close relationship between the subject matter and the real life of the learner. This approach is aligned with the principle of meaningful learning, where students construct understanding by linking new information with prior knowledge and real-life experiences. It aims to make learning more relevant and meaningful for students by connecting the concepts taught in the classroom with their everyday experiences. For example, when teaching about mathematical concepts such as fractions, teachers can provide real-life examples of everyday life situations, such as dividing cakes or food into equal portions. In this way, students not only learn formulas, but also understand how they are applied in real life.

In a contextual approach, real-world situations are used to help students understand the concepts being taught. This makes learning more interesting, as students can see firsthand the relevance of the material to their lives. By integrating joyful learning, teachers present real-world contexts in engaging ways that spark curiosity and enjoyment during the learning process. This contextual learning also develops students' ability to think critically and solve problems, as they encounter situations that require a deeper understanding and application of knowledge. A study by Lebert (2023) emphasizes the importance of concrete experiences in learning, which can improve student engagement and comprehension of the material (Lebert & Vilarroya, 2024).

Active Reflection and the Role of Teachers as Facilitators

Active Reflection and the Role of Teachers as Facilitators Hayat School integrates active reflection in the learning process, allowing students to evaluate and reflect on their learning experiences. This is part of mindful learning, which encourages students to be fully aware of their learning process, their thoughts, and their emotions while engaging with the material. This approach strengthens students' metacognitive abilities, i.e., thinking about their own way of thinking. A study by Rodriguez et al. shows that active reflection can improve students' self-understanding and character development. (Rodriguez et al., 2024).

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Collaboration, Meaningful Discussions, and Strengthening HOTS

Hayat School encourages collaborative learning through group discussions and joint projects, which aim to develop higher-order thinking skills (HOTS). In this collaborative setting, the integration of meaningful learning is evident as students are encouraged to relate discussions to their own perspectives and experiences. In contrast, joyful learning is fostered through teamwork and interactive discussions. Studies by Zhang and Ma show that project-based learning can improve students' critical thinking skills, creativity, and problem-solving abilities. (L. Zhang & Ma, 2023).

Project-Based Learning

Hayat School implements Project-Based Learning (PjBL) to engage students in real and contextual projects. (Muchsinan et al., 2024; Smith A, 2020). This approach allows students to develop 21st-century skills, such as collaboration, communication, and problem-solving. Discussions and Implications of the Implementation of PjBL include: 1) Development of Collaboration and Communication Skills: PjBL encourages students to work in teams, share ideas, and complete tasks together, which significantly improves their collaboration and communication skills. A study by Rohmaniyah and Chariyathamsuksa (2024) shows that the implementation of PjBL in secondary school can improve students' collaborative and creative abilities. (Rohmaniyah & Asih, 2024). 2) Improved Problem-Solving Skills: Through challenging projects, students learn to identify problems, design solutions, and evaluate outcomes. The essence of mindful learning emerges when students critically reflect on every step of problem-solving and analyze multiple perspectives before deciding on solutions. Research by Matahari et al. (2023) confirms that PjBL is effective in facilitating 21st-century skills, including problem-solving (Matahari et al., 2023). 3) Student Engagement and Motivation: PjBL increases student engagement in the learning process because they feel responsible for the project they are working on. Artama et al. found that PjBL can increase students' motivation to learn by providing meaningful learning experiences (Artama et al., 2023). 4) Challenges in Implementation: Although PjBL has many benefits, its implementation can face challenges such as time constraints, resources, and teacher training needs (Artama et al., 2023). Selasmawati and Lidyasari highlight the importance of institutional support and training for teachers to overcome these barriers. (Selasmawati & Lidyasari, 2023). It is concluded that the implementation of PjBL in Hayat School shows great potential in developing students' 21st-century skills. With the proper support, this approach can be an effective learning strategy to prepare students for future challenges. A study by For Deeper Learning shows that PjBL can increase student engagement and deeper learning outcomes. (Muchsinan et al., 2024).

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Personal and Value-Based Curriculum of Tauhidullah

Hayat School implements a personalized curriculum based on the values of tauhidullah as the primary foundation in the educational process. This approach not only focuses on academic achievement but also integrates spiritual, moral, and social aspects throughout the learning process. By embedding meaningful learning within the value-based curriculum, students are guided to see the relevance of knowledge in the context of faith and life purposes. Joyful learning is also cultivated through spiritual practices that are not rigid but instead bring a sense of happiness and peace. This curriculum is designed to form students who have faith, piety, and noble character in daily life. This approach is in line with a study by Mulianah, which emphasizes the importance of integrating Islamic values in the educational curriculum to form a holistic student character (Mulianah, 2023).

Institutional Supporting Facilities and Inclusivity

Hayat School provides facilities such as the Hayat Inn to support students from outside the city, creating an inclusive and supportive learning environment. This facility not only provides a place to live, but also a space for the development of students' character and spirituality. In this inclusive environment, mindful and joyful learning principles are strengthened, as students experience a sense of belonging, engagement, and shared responsibility in both academic and spiritual growth. This approach reflects Hayat School's commitment to creating a holistic and inclusive education ecosystem.

CONCLUSION

The application of the Deep Learning approach at Hayat School, now known as the School of Creative Minds (SCM), shows a significant transformation in the world of education. Through contextual learning, active reflection, meaningful discussions, and project-based learning, students are actively involved in a real and meaningful learning process. This approach not only enhances academic understanding but also shapes character, social awareness, and 21st-century skills such as critical thinking, collaboration, and effective communication. The teacher acts as a facilitator or Brother Fasil, creating a dialogue space and supporting students' exploration in depth and reflectively.

Furthermore, the success of implementing deep learning at Hayat School cannot be separated from a personalized curriculum tailored to each student's unique potential, as well as the values of Tauhidullah, which form the spiritual foundation of education. Institutional inclusivity, through the provision of supporting facilities like the Hayat-Inn and a flexible, value-based learning environment, strengthens a humanist and transformative educational ecosystem. Thus, this pedagogical innovation

is not only relevant to answer the challenges of modern education, but also an ideal model in integrating technology, Islamic values, and individual learning needs in harmony.

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