DEEP LEARNING APPROACH IN ENGLISH LANGUAGE TEACHING: DOES IT MATTER A LOT?

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Abstrak

Tulisan ini melaporkan hasil dari kegiatan 'Pengabdian kepada Masyarakat (PkM)' terkait pengintegrasian teknologi dalam pengajaran bahasa Inggris di Indonesia. Kegiatan PkM ini diadakan bagi guru Bahasa Inggris SMP di Kabupaten Bogor, Indonesia. Artikel ini memaparkan desain, pelaksanaan, dan evaluasi dari sebuah program pengembangan profesional yang terstruktur, yang bertujuan membekali para guru dengan pengetahuan, keterampilan, dan kapasitas reflektif yang dibutuhkan untuk mengadopsi Deep Learning (DL) dalam kerangka Kurikulum Merdeka di Indonesia. Dengan merujuk pada kerangka 6C dari Michael Fullan (yaitu: character, citizenship, collaboration, communication, creativity, dan critical thinking), kegiatan ini menekankan transformasi pedagogis, yang bukan berorientasi pada pembelajaran tradisional, menuju pembelajaran yang berpusat pada siswa dan berbasis inkuiri. Program ini dilaksanakan dalam empat tahap: observasi, sosialisasi, pelatihan dan pendampingan, serta evaluasi. Setiap tahap memungkinkan para fasilitator untuk memetakan kondisi pembelajaran peserta, menyusun materi pelatihan yang relevan secara kolaboratif, dan mengevaluasi dampaknya melalui pendekatan kualitatif dan kuantitatif. Hasil kegiatan menunjukkan peningkatan signifikan dalam kesadaran guru terhadap prinsip-prinsip DL, peningkatan kepercayaan diri dalam praktik pedagogis, serta keinginan untuk mengimplementasikan pengajaran bahasa Inggris yang lebih bermakna dan kontekstual. Tema utama yang dibahas mencakup keselarasan antara DL dan Profil Pelajar Pancasila, strategi dalam mengatasi tantangan implementasi, serta integrasi Artificial Intelligence untuk memperkuat kompetensi abad ke-21. Temuan dalam artikel ini menunjukkan bahwa DL menawarkan jalan transformatif untuk merevitalisasi pengajaran bahasa Inggris di Indonesia dengan menyelaraskan inovasi pendidikan global dengan tujuan kebijakan lokal. Artikel ini merekomendasikan perlunya investasi berkelanjutan dalam pelatihan guru, infrastruktur digital, dan penyelarasan kurikulum guna memastikan adopsi DL yang merata dan berskala nasional.

***Kata kunci**: Deep learning, pengajaran Bahasa Inggris, transformasi kurikulum, pengembangan profesionalisme guru, keterampilan abad-21.*

Abstract

This paper reports the outcomes of a 'Community Service' activity related to the implementation of the Deep Learning (DL) approach in English language teaching in Indonesia. The activity was conducted for junior high school English language teachers in Bogor regency, Indonesia. It outlines the design, implementation, and evaluation of a structured professional development program aimed at equipping teachers with the knowledge, skills, and reflective capacity needed to adopt Deep Learning within the framework of Indonesia's Merdeka Belajar curriculum. Drawing on Michael Fullan's 6Cs framework (i.e., character, citizenship, collaboration, communication, creativity, and critical thinking), the activity emphasized pedagogical transformation that moves beyond traditional content delivery toward student-centered, inquiry-based learning. The program adopted a four-stage model: observation, socialization, training

and mentoring, and evaluation. These stages allowed facilitators to map the instructional realities of the participants, co-construct relevant training content, and evaluate the impact through both qualitative and quantitative measures. The results indicated a significant increase in teachers' awareness of DL principles, improved pedagogical confidence, and willingness to implement more meaningful and contextualized English Language Teaching (EFL) practices. Key themes explored included the coherence between DL and the national Profil Pelajar Pancasila, strategies to overcome implementation challenges, and the integration of AI tools to enhance 21st-century competencies. The findings suggest that DL offers a transformative avenue for revitalizing ELT in Indonesia by aligning global educational innovations with local policy goals. This paper recommends sustained investment in teacher training, digital infrastructure, and curricular alignment to ensure scalable and equitable adoption of DL nationwide.

Keywords*: Deep learning, English language teaching, curriculum transformation, teacher professional development, 21st-century skills.*

1. INTRODUCTION

The rapid advancements in global education and technology have prompted nations worldwide to reevaluate their curriculum frameworks to address the evolving demands of the 21st century. Competency-based approaches have emerged as pivotal in bridging the gap between traditional education paradigms and the skillsets required in today's dynamic, interconnected, and technologically driven world (Lature et al., 2024). Nations such as Finland and Singapore have embraced these transformative frameworks, emphasizing critical thinking, collaboration, and digital literacy as essential pillars of modern education (Huang, 2024; Wu & Tan, 2021). In the Indonesian context, educational reform has been a central agenda to ensure that learners are equipped to thrive in a globalized economy and society. However, this transition poses unique challenges and opportunities, particularly in the domain of English language teaching (ELT).

Indonesia's journey of curriculum transformation reflects its commitment to aligning with global educational standards. Beginning with the Competency-Based Curriculum (Kurikulum Berbasis Kompetensi or KBK) in the early 2000s, the nation took initial steps to shift from rote memorization toward a more skills-oriented approach (Thummaphan et al., 2022). This was followed by the School-Based Curriculum (Kurikulum Tingkat Satuan Pendidikan or KTSP), which granted greater autonomy to schools, enabling contextualization of learning. The implementation of the 2013 Curriculum (Kurikulum 2013) marked another milestone, emphasizing character education and integration of competencies such as critical thinking and creativity (Azzahra et al., 2022; Lestari, 2023; Qomariyah & Maghfiroh, 2022). Most recently, the introduction of the Merdeka Belajar initiative has brought a new wave of innovation by promoting flexible learning pathways and independence. Amid these shifts, the emerging discourse on "Deep Learning" introduces an opportunity to further elevate Indonesia's curriculum by embedding analytical reasoning, problem-solving, and lifelong learning into educational practices.

Despite these ambitious reforms, ELT in Indonesia remains a critical area that requires deeper exploration and adaptation. As a global lingua franca, English plays a pivotal role in enabling Indonesians to access academic and professional international opportunities (Boy Jon et al., 2021; Jon et al., 2021). However, challenges persist in bridging the gap between policy expectations and classroom realities. For instance, while the 2013 Curriculum advocates for communicative competence and critical thinking, traditional methods focusing on grammar translation and passive learning continue to dominate many classrooms. The Merdeka Belajar

framework offers flexibility, but its practical implications for ELT are yet to be fully realized, particularly in fostering meaningful and sustainable learning experiences (Yulianto, 2022).

The concept of Deep Learning presents a transformative potential for addressing these challenges in ELT. Deep Learning emphasizes higher-order cognitive processes, creativity, and real-world application, moving beyond surface-level memorization of language rules. This approach aligns with global trends in language education, where learners are not only equipped with linguistic proficiency but also the ability to use the language to think critically, solve problems, and collaborate in diverse contexts (Mohammed & Kora, 2023; Oliveira & Bollen, 2023). For Indonesian students, integrating Deep Learning into ELT could bridge the gap between academic preparation and real-world demands, fostering competencies that resonate with the aspirations of the 21st-century workforce and society.

However, the integration of Deep Learning in ELT within the context of Indonesia's curriculum transformation raises several pertinent questions. While there is growing global literature on Deep Learning, studies specific to ELT and curriculum reforms in Indonesia remain sparse. The existing body of research predominantly focuses on macro-level policies or isolated pedagogical interventions, leaving a gap in understanding the comprehensive implications of Deep Learning for English language education. This gap underscores the need for a systematic investigation that bridges policy, pedagogy, and classroom practice within Indonesia's dynamic curriculum landscape.

Based on the background above, the English Education Program, Graduate School, Universitas Terbuka held 'Community Service' activities in 2025, which were held offline (face to face) among junior high school EFL teachers in Bogor regency, Indonesia. These activities have facilitated the participating teachers to increase their knowledge, skills, and awareness about deep learning as a new learning approach initiated by the Ministry of Primary and Secondary Education (Kemdikdasmen).

In general, this Community Service activity aims to equip participants with knowledge, skills, and insights into a new learning approach intended to enhance students' academic achievement. More specifically, the objectives of the activity were twofold:

- To explore the opportunities and challenges of integrating deep learning into English Language Teaching within the framework of Indonesia's ongoing curriculum transformation.
- To examine the feasibility of operationalizing a deep learning framework to improve learner outcomes and support the objectives of Indonesia's national education policies.

2. IMPLEMENTATION METHOD

The first community service activity was conducted on May 16th, 2025, among junior high school EFL teachers in Bogor regency, Indonesia. The activity was conducted offline in SMP Islam Parung, Bogor regency. The details of the implementation of the community service are depicted in the results and discussion part.

The participants of the community service activity were 42 junior high school English language teachers in Bogor regency who were actively involved in the Subject Teacher's Forum[1] (STF). The source person and facilitators were the lecturers of the Master of English Language Education, Graduate School, Universitas Terbuka (UT), Indonesia. The topic of the first community service activity was "Optimizing English Language Learning through the Implementation of Deep Learning Approach".

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[1] Subject Teacher's Forum refers to *Musyawarah Guru Mata Pelajaran* (MGMP) in Indonesian Education context.

The Community Service activities were strategically designed to bring substantial and practical benefits to the target participants, junior high school English teachers in Bogor Regency. By aligning with the principles of capacity-building and sustainable professional development, the implementation framework ensured that each phase of the activity addressed both immediate instructional needs and long-term pedagogical goals. The methodology adopted follows a four-stage cycle: observation, socialization, training and mentoring, and evaluation, each contributing meaningfully to the overall impact of the program.

Figure 2. The community service activity stages

1. **Observation Stage**. The initial phase focused on conducting a situational analysis to determine the specific educational contexts, institutional readiness, and existing teaching practices in the target schools. This stage involved field visits and informal discussions to map out the most relevant aspects of the Deep Learning approach that would be both needed and feasible for implementation. The findings from this stage guided the design and customization of the subsequent training materials and interventions.

2. **Socialization Stage**. The purpose of this phase was twofold: to formally communicate the objectives and expected outcomes of the program to key stakeholders (including MGMP leaders and school supervisors), and to carry out a comprehensive needs assessment. Feedback collected during this stage allowed the facilitators to validate initial assumptions, adapt content to participants' professional needs, and foster a collaborative atmosphere between organizers and beneficiaries.

3. **Training and Mentoring Stage**. This core stage combined theoretical input with interactive, practice-based learning. Training sessions incorporated presentations on the Deep Learning approach in English Language Teaching (ELT), emphasizing its core dimensions, critical thinking, collaboration, creativity, and self-regulation. These were followed by structured mentoring activities, including peer teaching, lesson planning workshops, and micro-teaching sessions. This blended format ensured that participants could immediately apply newly acquired knowledge in realistic classroom simulations, reinforcing long-term retention and adoption.

4. **Evaluation Stage**. To ensure accountability and continuous improvement, a systematic evaluation was conducted post-training. This included both quantitative (e.g., questionnaires and performance assessments) and qualitative (e.g., focus group discussions and reflective journals) instruments. The evaluation focused not only on measuring knowledge gains but also on identifying implementation challenges and generating recommendations for future follow-ups. Participant feedback indicated increased awareness of Deep Learning principles and a higher confidence level in integrating them into their English teaching practices.

Figure 1. The participants of the community service activity

3. RESULTS AND DISCUSSION

This section presents and discusses the main topics in 'Meeting One' of the community service activities. There were five main topics in the meeting: Deep Learning Framework, Deep Learning Graduate Profile vs Pelajar Pancasila Profiles, Challenges and Strategies in Implementing Deep Learning, and AI and Deep Learning Coherence.

3.1 Deep Learning Framework

The Ministry of Primary and Secondary Education (Kemdikdasmen) has embraced the Deep Learning approach within the Indonesian education system as a strategic response to evolving educational demands, driven by four interrelated challenges. First, the unpredictability of future global changes necessitates a transformative pedagogy that nurtures learners' adaptability and resilience. This includes preparing students for complex, uncertain, and rapidly changing environments by fostering higher-order thinking, problem-solving, and socio-emotional skills. Second, Indonesia's Demographic Dividend 2035 and its Vision 2045 for a "Golden Indonesia" underscore the urgent need to optimize the nation's human capital potential. To this end, education must shift from rote learning to deeper cognitive engagement to empower the upcoming generations to be not merely workers but innovators and critical thinkers who can lead the nation forward.

Third, persistent quality issues in Indonesian education, particularly in literacy, numeracy, and higher-order thinking skills (HOTs), alongside widening disparities across regions, demand systemic reforms that go beyond surface-level interventions. The Deep Learning approach aligns with the Merdeka Belajar curriculum, which seeks to promote authentic learning experiences that are meaningful, contextualized, and student-centered. Fourth, the urgency to equip learners with future competencies, such as digital literacy, collaboration, creativity, and lifelong learning habits, makes Deep Learning not only relevant but essential. These competencies are increasingly viewed as prerequisites for success in the 21st-century knowledge economy (Fullan et al., 2018). By embedding deep learning principles into classroom practice, Kemdikbudristek positions education as a transformative force to realize inclusive, equitable, and high-quality

learning outcomes for all Indonesian students. Figure 3 shows the fourth background of implementing deep learning in the Indonesian education system.
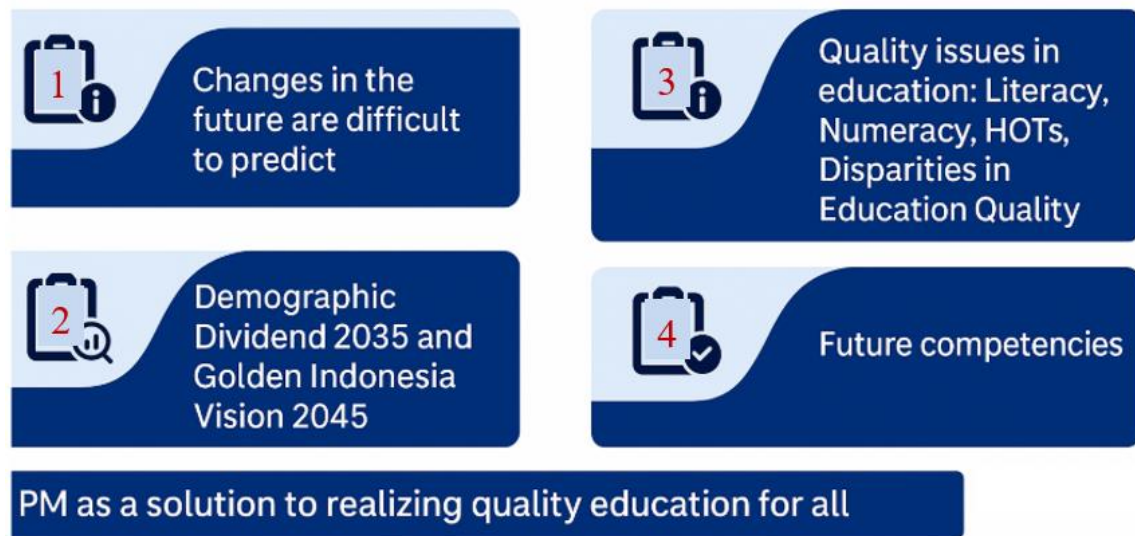

Figure 3. Background of Deep Learning Implementation in Indonesia

The Indonesian Ministry of Education has strategically adopted the Deep Learning framework from the global education movement known as *New Pedagogies for Deep Learning* (NPDL), pioneered by Michael Fullan et al (2018). At the heart of this framework lies the development of six global competencies, collectively known as the 6Cs, which serve as the foundation of 21st-century education. These competencies include: Character, Citizenship, Collaboration, Communication, Creativity, and Critical Thinking. These skills are essential not only for academic achievement but also for preparing students to be proactive contributors in a globally interconnected and rapidly changing world. By integrating the 6Cs into classroom practices, Indonesian education seeks to shift away from rote memorization toward a more holistic, student-centered learning experience. This transformation aligns closely with the Merdeka Belajar curriculum, which emphasizes learner agency, authentic learning contexts, and interdisciplinary approaches.

CONCEPT & DEFINITION OF DEEP LEARNING

The Deep Learning approach, written by Michael Fullan, Joanne Quinn, and Joanne McEachen, is presented in their book titled *DEEP LEARNING: Engage the World, Change the World* (2018).
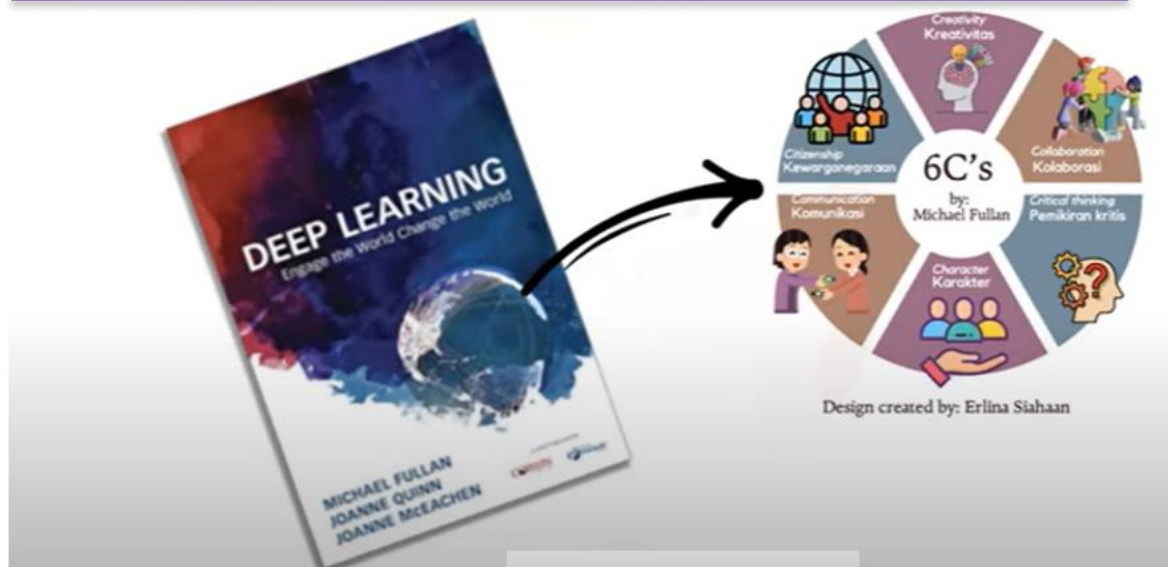
Figure 4. Concept of Deep Learning in New Pedagogies of Deep Learning (NPDL)

Deep Learning, as conceptualized by Fullan et al. (2018), is not merely a pedagogical trend but a purposeful educational transformation aimed at fostering meaningful learning. It is defined as an approach that enables students to build global competencies through active engagement with real-world issues that are relevant to their lives and communities. This model positions students not just as learners but as agents of change, equipped with the cognitive, emotional, and ethical capacities to solve complex local and global challenges (O'Connor & McEwen, 2020). By moving beyond superficial content delivery, deep learning connects academic content to students' experiences, passions, and societal roles, thereby promoting motivation, relevance, and deeper understanding. This paradigm is critical for nations like Indonesia, which aim to harness the demographic dividend and produce a future-ready generation capable of thriving in volatile, uncertain, complex, and ambiguous (VUCA) contexts.

The alignment between Michael Fullan's Deep Learning framework and Indonesia's *Pembelajaran Mendalam* is clearly visible in both conceptual foundation and practical application (see Figure 5). Both frameworks emphasize the transformation of learning through four interdependent elements: pedagogical practices, learning partnerships, learning environments, and leveraging digital tools. In the Indonesian adaptation, these are contextualized as "Kerangka Pembelajaran," forming a learning ecosystem that cultivates competencies like critical thinking, communication, creativity, collaboration, citizenship, and character, mirroring the original 6Cs from NPDL (Fullan et al., 2018). Furthermore, *Pembelajaran Mendalam* integrates national values such as faith, health, and independence, ensuring local cultural relevance while aligning with global education standards. This synergy demonstrates that Indonesia's educational reform is not only adopting international best practices but also contextualizing them to foster deeply engaged, reflective, and impactful learners in accordance with national identity and future challenges (Santana et al., 2020).
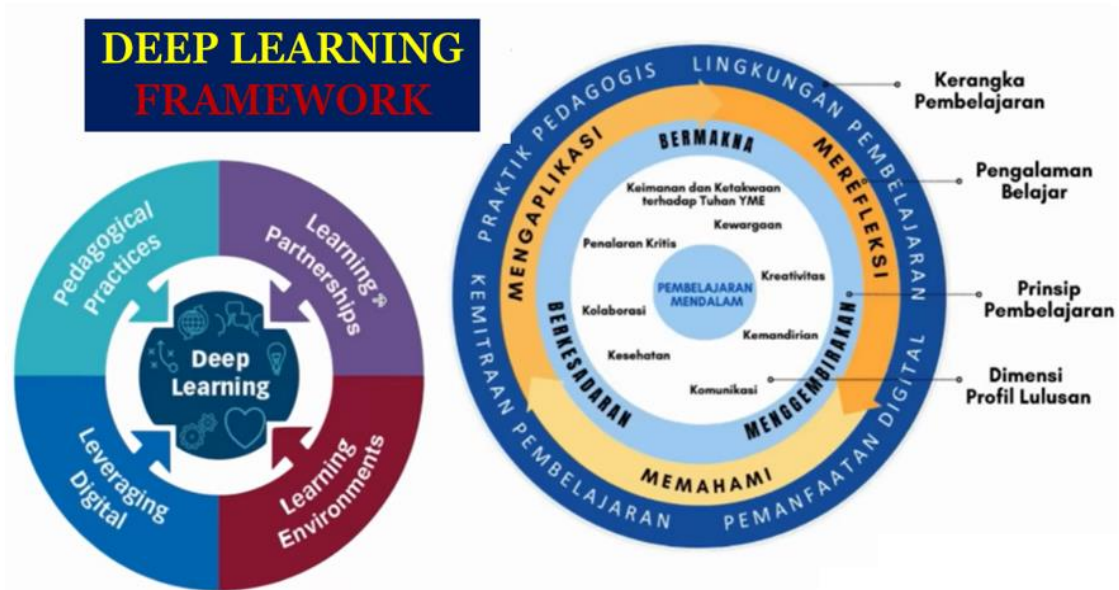
Figure 4. The Alignment between Deep Learning by Fullan et. al., (2018)
and *Pembelajaran Mendalam* by Kemdikdasmen

Kemdikdasmen integrates mindful, meaningful, and joyful learning into the Deep Learning approach to transform traditional education into a more student-centered and impactful experience. Mindful learning emphasizes attentiveness to each student's unique needs and background, which is crucial in a country as diverse as Indonesia to ensure inclusivity and equity in the classroom (UNESCO, 2020). Meaningful learning, which connects academic content to real-world contexts, helps students see the relevance of what they learn and improves long-term retention and motivation, key for addressing Indonesia's persistent challenges in literacy and numeracy. Meanwhile, joyful learning promotes emotional engagement, which research shows enhances creativity, reduces dropout rates, and fosters a positive school climate essential for effective learning (Susiani & Abadiah, 2021). These three pillars are not just pedagogical preferences but strategic necessities to build a generation that is competent, emotionally intelligent, and ready to navigate the demands of the 21st century. By embedding these elements into the Deep Learning framework, Indonesia is paving the way for a more responsive and humanistic education system.

3.2 Deep Learning Graduate Profiles vs *Pelajar Pancasila* Profiles

Another theme that has been discussed was key aspects in deep learning graduate profiles compared to the "Profil Pelajar Pancasila". The Pelajar Pancasila profiles and the graduate profile outlined in the Deep Learning framework share striking similarities, underscoring a shared vision for holistic, future-ready learners. Both emphasize core competencies such as critical thinking, creativity, collaboration, citizenship, character, and communication, mirrored in Fullan's 6Cs. This congruence demonstrates that *Merdeka Belajar* and Deep Learning are not mutually exclusive but complementary in nature. However, Deep Learning offers a more structured, globally recognized framework for operationalizing these values into everyday

classroom practices. Therefore, evolving from Merdeka Belajar to a Deep Learning-based system would strengthen Indonesia's education transformation by aligning national ideals with proven international pedagogical strategies. This transition would not abandon national identity but elevate it within a competitive, global learning ecosystem.
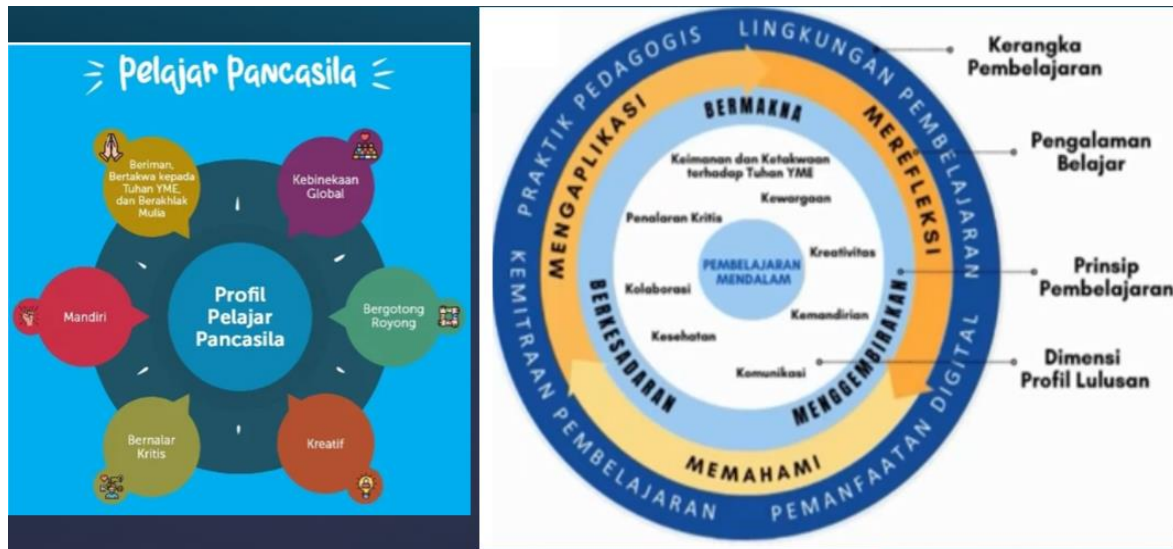
Figure 5. The Comparison between Deep Learning Profiles and *Pelajar Pancasila* Profiles

One of the reasons for implementing deep learning is to increase Indonesian PISA (Programme for International Students Assessment) scores. Deep Learning, by design, promotes cognitive rigor, real-world relevance, and socio-emotional development, all of which are foundational to the kinds of literacy, numeracy, and problem-solving tasks found in PISA. The latest 2022 PISA results revealed persistent gaps in Indonesian students' ability to analyze and apply knowledge critically; an issue Deep Learning is well-suited to address. Its emphasis on meaningful learning experiences, student agency, and interdisciplinary integration cultivates Higher Order Thinking Skills HOTs) essential for global competency (OECD, 2019). By embedding this approach into curriculum design, Indonesia can foster a generation that is both locally grounded and globally competent, capable of not just academic success but transformative leadership.

Figure 6. The Source person shared ideas of Deep Learning and *Pelajar Pancasila* profiles

Teachers' paradigms, pedagogical knowledge, and instructional skills are pivotal to the success of any educational reform, including the Deep Learning approach. This model requires educators to shift from content transmitters to learning designers and facilitators, emphasizing student engagement, reflection, and real-world application. Countries such as Canada, Finland, and New Zealand have successfully implemented the Deep Learning framework, leading to improved student motivation, deeper understanding, and stronger civic engagement. These countries invested in teacher professional development and collaborative school cultures to embed the 6Cs in daily instruction. For Indonesia, empowering teachers with the philosophy and tools of Deep Learning is not just desirable, it is indispensable to ensuring sustainable education reform. The following are two quotes that represent what the participants perceived of the implementation of deep learning.

It seems that deep learning will help students see themselves not just as learners, but as future citizens who need to think critically, care for others, and apply language in real contexts. Therefore, this learning approach can make teaching more meaningful and enjoyable.

Merdeka Belajar gives me the freedom to choose methods, but Deep Learning guides me with clarity, what to focus on, how to assess, and how to connect learning to life. It brings structure, purpose, and global relevance to my English classes.

3.3 Challenges and Strategies in Implementing Deep Learning

The implementation of Deep Learning among Indonesian EFL teachers faces several barriers, primarily due to infrastructural, educational, and technological challenges. Addressing these challenges involves a multifaceted approach that includes improving infrastructure, enhancing teacher training, and fostering collaboration among stakeholders.

One of the most pressing challenges in implementing the Deep Learning approach in Indonesia lies in the persistent digital divide, particularly in remote and underdeveloped regions.

Limited internet connectivity and inadequate technological infrastructure hinder the effective integration of digital tools that support student-centered, inquiry-based learning, core elements of the Deep Learning pedagogy (Suwandi et al., 2024). This disparity restricts both teachers and students from accessing engaging, meaningful, and reflective learning experiences that align with the national vision for transformative education. As the Deep Learning approach encourages collaboration, communication, and creativity through the use of interactive and contextualized digital resources, the absence of basic infrastructure becomes a systemic obstacle (Purmayanti, 2022). Addressing this gap must be a top national priority if Indonesia is to ensure equitable and high-quality education that reaches all corners of the country, in line with the goals of *Merdeka Belajar*.

Figure 7. The participants shared their ideas on Deep Learning as a new learning approach

In addition to infrastructure challenges, teacher readiness and curriculum rigidity represent significant barriers to the successful implementation of Deep Learning. Most teachers have not received comprehensive professional development (Bachtiar, 2021) that equips them with the skills and confidence needed to integrate AI tools and Deep Learning strategies into classroom practice. Without targeted training, teachers may feel overwhelmed or resistant to change, especially when instructional innovations are introduced without adequate pedagogical support. Furthermore, the current curriculum structure in many Indonesian schools remains highly prescriptive and examination-oriented, leaving little flexibility for inquiry-based or student-driven learning approaches that are central to Deep Learning. This misalignment between curricular demands and pedagogical innovation risks reducing Deep Learning to a superficial trend rather than a transformative shift. Overcoming these challenges requires systemic reforms in both teacher education and curriculum design that align with 21st-century learning demands.

To address the knowledge and skill gaps, sustained, practice-oriented professional development must be prioritized. Kemdikdasmen should invest in structured training programs focused on designing and implementing deep learning experiences in EFL classrooms. These programs should include lesson study cycles, classroom action research, and mentoring by expert teachers or facilitators who have successfully applied the 6Cs in English instruction (Nahar & Machado, 2025). Modules should be tailored to different regional contexts and accessible through both offline and online platforms to ensure wide reach. Emphasis must be placed not only on conceptual understanding but on the practical integration of inquiry, reflection, collaboration, and communication within EFL tasks (Maryani et al., 2025).

Transforming teachers' mindsets requires building professional learning communities (PLCs) that encourage collective inquiry, reflective dialogue, and knowledge-sharing. Teachers need safe and supportive spaces to experiment with new ideas, receive constructive feedback,

and observe best practices (Didier, 2025). School leaders and supervisors must also be included in capacity-building initiatives to create a shared understanding of Deep Learning goals and to support change from the top down to the bottom up. Furthermore, embedding Deep Learning into teacher promotion criteria and performance evaluations will signal its importance and encourage genuine commitment rather than compliance (Pan & Wang, 2025).

Lastly, policy and ecosystem alignment are essential. Kemdikdasmen must ensure that curriculum frameworks, assessment systems, and resource allocation are fully aligned with Deep Learning principles. Performance-based assessment rubrics, digital portfolios, and project-based evaluations should be gradually integrated into national and school-level assessments to reflect broader competencies beyond rote memorization. Infrastructure investment must prioritize digital equity to enable EFL teachers to leverage global content and tools for collaborative, intercultural learning (Nguyen & Hoang, 2025; Pan & Wang, 2025). When supported by coherent policy, strong school leadership, and engaged communities of practice, Indonesian EFL teachers will be better equipped and more confident to implement Deep Learning in ways that are transformative, inclusive, and sustainable.

3.4 Artificial Intelligence and Deep Learning Coherence

In the current era of Artificial Intelligence (AI), the urgency to reform traditional learning models has grown significantly, particularly in Indonesia's EFL classrooms. AI is reshaping how information is accessed, processed, and applied, demanding a generation of learners who can think critically, communicate effectively, and adapt swiftly. This reality calls for an education framework that moves beyond content delivery and fosters deeper engagement with knowledge. The Deep Learning framework proposed by Fullan et al. addresses this need by emphasizing global competencies (i.e., creativity, citizenship, collaboration, communication, character, and critical thinking) that are essential in navigating an AI-driven world. For Indonesian EFL teachers, implementing this model is not only relevant but imperative in order to cultivate language learners who can apply English meaningfully in real-world and technologically mediated contexts (Suwandi et al., 2024).

However, coherence between AI integration and Deep Learning cannot be achieved without addressing the pedagogical readiness of teachers. Many Indonesian EFL teachers still rely on rote-based methods and grammar-focused instruction, which are misaligned with the inquiry-based, student-centered ethos of both AI-enhanced education and the Deep Learning approach. Without professional development that equips teachers to design authentic learning tasks, using AI tools to support personalized learning, peer collaboration, and critical reflection, the transformative potential of Deep Learning will remain unrealized (Eldin, 2024). Teachers must be supported not only to understand AI as a tool but also to integrate it within the 6Cs competencies to ensure that learners are not passive consumers of technology but active agents in its use. Therefore, strengthening teacher competence becomes the linchpin for bridging the gap between AI advancement and Deep Learning implementation (Setyaningsih et al., 2024).

A key strategy to establish coherence between AI and Deep Learning is through the four core design elements of Fullan's framework: pedagogical practices, learning partnerships, learning environments, and digital leverage. These pillars align naturally with the potential of AI in education, such as enabling adaptive feedback, fostering collaborative learning communities, and enriching instructional content. For instance, AI tools can support differentiated instruction and language practice tailored to student needs, while Deep Learning ensures that these tools are used to deepen understanding, not replace human connection. In this sense, technology becomes an enabler, not a substitute, for deep and reflective learning. In the Indonesian context, EFL teachers should be encouraged to use AI platforms not just for drills or content delivery, but to co-create knowledge with students, scaffold metacognitive skills, and engage learners in

meaningful language use within culturally relevant contexts (Bachtiar, 2025; Williyan et al., 2024).

Finally, the outcome of integrating AI and Deep Learning must be measured not only by test scores but by the development of learner agency and global citizenship. The goal is to shape students who can use language critically, ethically, and creatively to contribute to society, skills that align with both the *Profil Pelajar Pancasila* and the "Portrait of a Learner" as envisioned in the global Deep Learning movement. Indonesian EFL education should aim to produce communicators and thinkers who are fluent in English and fluent in thought. To achieve this, schools, teacher education institutions, and policymakers must collaborate to embed Deep Learning within curriculum structures, teacher training programs, and classroom practices. When AI and Deep Learning are implemented in synergy, Indonesia can take a significant leap in transforming its education system to prepare students for both local relevance and global impact (Wei & Ji, 2018).

4. CONCLUSION

The community service activity conducted by the English Language Program, Graduate School, Universitas Terbuka, has successfully served its purpose in enhancing teachers' understanding and preparedness to adopt the Deep Learning approach in ELT. Grounded in the broader context of Indonesia's ongoing curriculum transformation, this initiative effectively provided junior high school EFL teachers with conceptual clarity, practical tools, and critical awareness regarding the operationalization of DL. The carefully sequenced stages, ranging from observation and socialization to training, mentoring, and evaluation, ensured that teachers not only received exposure to theoretical insights but also engaged in meaningful pedagogical reflection and classroom application. By aligning the DL framework with both national education goals and global pedagogical trends, the program illuminated pathways for advancing competencies such as critical thinking, creativity, and collaboration in Indonesian classrooms. The participants' growing confidence and positive perception toward DL signal a promising shift in pedagogical paradigms, paving the way for more student-centered, inquiry-driven English instruction.

The implications of this initiative extend beyond immediate instructional practices, offering a strategic blueprint for systemic transformation in Indonesian education. To ensure long-term impact, it is essential that policymakers institutionalize DL through integrated curriculum design, performance-based assessments, and inclusive professional development programs tailored to regional and technological realities. Teacher readiness must be prioritized through sustained mentoring, professional learning communities, and leadership support that cultivates reflective practice and innovation. Moreover, aligning DL with AI integration presents a critical opportunity to develop globally competent learners who are not only fluent in English but also empowered to engage meaningfully with 21st-century challenges. It is recommended that future community service programs deepen their reach through digital platforms, context-sensitive modules, and policy advocacy to foster a more equitable and transformative educational ecosystem across Indonesia.

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