

ENGLISH TEACHERS' PERCEPTIONS OF DEEP LEARNING IMPLEMENTATION IN CLASSES: A SURVEY-BASED STUDY

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Abstract

This study investigates English teachers' perceptions of deep learning implementation in vocational high schools (SMKs) in Semarang, Indonesia. Deep learning, as promoted in recent curriculum reforms, emphasizes higher-order thinking, reflective practice, and student-centered engagement. However, the extent to which teachers understand and apply these principles in English language instruction remains underexplored. Adopting a quantitative survey design, the study involved nine English teachers from various vocational schools. Data were collected through a structured questionnaire comprising items related to teachers' understanding, lesson planning, collaboration, and classroom application of deep learning principles. Descriptive statistics were used to analyze teachers' responses, supplemented by qualitative insights from open-ended items. The findings reveal that teachers hold positive perceptions toward deep learning, particularly in conducting initial assessments, aligning learning outcomes with graduate profiles, and integrating higher-order thinking skills (HOTS). However, implementation tends to be inconsistent and procedural, as reflection and revision of lesson plans are performed only occasionally. Collaboration with peers and integration across subjects were also found to be moderate. Teachers identified several challenges, including administrative workload, lack of continuous professional training, and limited opportunities for collegial collaboration. The study concludes that while English teachers demonstrate conceptual readiness and positive attitudes, they require stronger institutional support and sustained professional development to transform perception into consistent pedagogical practice. It recommends targeted mentoring, simplified administrative systems, and reflective learning communities to enhance the quality of deep learning implementation in English education.

Keywords: Deep learning; English teachers; Higher-order thinking skills; Perceptions, Reflective teaching; Vocational high school.

INTRODUCTION

In recent years, the concept of *deep learning* has become a central focus in educational reform, emphasizing the development of students' higher-order thinking, creativity, reflection, and meaningful engagement with learning content. Deep learning encourages learners not only to memorize information but also to understand, apply, and reflect upon knowledge in real-life contexts. Within English language teaching (ELT), deep learning is particularly crucial, as language mastery requires the integration of cognitive, affective, and social skills. It moves beyond rote learning toward meaningful communication and critical thinking, skills essential for 21st-century learners (Alfaruki, 2023; Dima et al., 2024; Fadhillah et al., 2023).

In Indonesia, the implementation of deep learning has been promoted through the *Merdeka Belajar* (Independent Learning) framework, which encourages teachers to design learning activities that are student-centered, reflective, and contextually meaningful. English teachers are therefore expected to integrate the principles of *3M* (Memahami, Mengaplikasi, Merefleksi, Understanding, Applying, Reflecting) and *BBM* (Berkesadaran, Bermakna, Menggembirakan, Conscious, Meaningful, and Joyful Learning) into classroom practices. These frameworks aim to foster deeper engagement, autonomy, and

emotional connection to learning while supporting students' holistic development (Kompas, 2024; Putri et al., 2024).

However, despite its conceptual importance, the extent to which English teachers understand and implement deep learning principles remains underexplored, especially in vocational school contexts. Teachers may face challenges related to curriculum alignment, assessment design, collaboration with peers, or the creation of innovative teaching media. In practice, factors such as administrative workload, limited digital competence, and insufficient professional development opportunities can also hinder the consistent application of deep learning pedagogy (Biggs & Tang, 2011; Fullan & Quinn, 2019; Indonesia, 2020).

To address this gap, the present study explores English teachers' perceptions and practices related to deep learning implementation in classroom instruction. The research draws on survey data collected from nine English teachers representing various vocational high schools (*Sekolah Menengah Kejuruan* or SMK) in Semarang. The survey examines teachers' understanding and application of deep learning indicators, including assessment practices, lesson plan reflection, collaboration, teaching media creation, and the integration of *3M* and *BBM* principles (Hague, 2024; Trilling & Fadel, 2009; Utomo, 2025; Weng et al., 2023).

This study contributes to a deeper understanding of teachers' pedagogical readiness and the contextual challenges that influence the implementation of deep learning in ELT classrooms. By identifying teachers' perceptions and practices, this research aims to inform future teacher training, curriculum design, and policy development that support meaningful learning experiences in vocational education.

Research Questions

Based on the background above, the study seeks to answer the following research questions:

1. How do English teachers perceive the implementation of deep learning principles in their classroom practices?
2. To what extent do English teachers apply deep learning components, such as initial assessment, graduate profile alignment, HOTS-based outcomes, and innovative teaching media, in lesson planning and instruction?
3. What are the existing challenges and needs identified by teachers in integrating deep learning into English language teaching?

METHODS

Research Design

This study employed a quantitative descriptive design using a survey-based approach to explore English teachers' perceptions of deep learning implementation in classroom practices. The design was chosen to capture teachers' self-reported understanding, attitudes, and experiences related to the integration of deep learning principles in English language teaching. Quantitative data were complemented by brief open-ended responses to provide additional qualitative insights into teachers' expectations and perceived challenges ((IES), 2017; Slater & Hasson, 2024).

Participants

The participants consisted of nine English teachers representing various vocational high schools (SMK) in Semarang, Indonesia. These schools included SMK Islamic Center Baiturrahman, SMK Walisongo Semarang, SMK Texmaco Semarang, Theresiana, SMK Penerbangan Kartika Aqasa, SMK Pelayaran AKPELNI, and Yayasan Pharmasi Semarang. As summarized in Table 1 of the Results section, Yayasan Pharmasi Semarang contributed the highest number of respondents (33.3%), while the remaining institutions each provided one teacher (11.1%).

The selection of vocational schools as the study sites was intentional, as these institutions integrate English teaching within technical and professional education programs. The participants represented diverse educational backgrounds, teaching experiences, and exposure to curriculum reforms related to the *Merdeka Belajar* framework.

Research Instrument

The primary data for this study were collected using a structured questionnaire developed by the researcher based on the key elements of deep learning pedagogy and the Indonesian curriculum framework. The instrument comprised both closed- and open-ended items, organized into three sections. The first section gathered background information such as school affiliation and teaching experience. The second section measured teachers' perceptions of deep learning implementation through five-point Likert-scale items addressing initial competence assessment, graduate profile alignment, formulation of learning outcomes using multiple action verbs (KKO), development of higher-order thinking skills (HOTS), creation of self-developed media, and the use of varied teaching methods and learning environments. The final section included open-ended questions inviting teachers' reflections, lesson plan revisions, and suggestions for improving deep learning practices. To ensure accessibility and convenience, the questionnaire was distributed digitally via Google Forms to participating teachers across institutions (Artino et al., 2014; Kelley et al., 2003).

Data Collection Procedures

Data were collected over a **two-week period** through online submission. Participants were contacted via the English Teachers' Working Group (*MGMP Bahasa Inggris*) in Semarang. Prior to participation, each teacher received an explanation of the study's objectives and provided informed consent.

The responses were automatically compiled into Google Sheets for quantitative tabulation. Qualitative comments were collected through open-ended items in the same form. The small-scale sample reflects an exploratory intention rather than statistical generalization.

Data Analysis

The collected data were analyzed through descriptive statistical techniques, focusing on frequency counts and percentages for each survey item. The results were then visualized in bar charts and tables to highlight patterns of teachers' perceptions and practices.

Quantitative data were interpreted to determine levels of teachers' understanding and implementation of deep learning principles. For instance, ratings of "4" and "5" indicated high perception or frequent practice, while ratings of "1" and "2" reflected limited understanding or low practice levels.

Meanwhile, qualitative responses from open-ended items were analyzed thematically to identify recurring ideas or concerns, such as the need for professional development, collaborative support, or administrative consistency. These qualitative insights enriched the interpretation of statistical findings, providing a more comprehensive understanding of teachers' perceptions and contextual challenges (Holmes, 2023; Roberts & Allen, 2015).

Ethical Considerations

Participation in the study was voluntary, and all respondents were informed that their data would be treated confidentially and used solely for academic purposes. No personal identifiers were collected, ensuring respondent anonymity.

FINDINGS AND DISCUSSION

This section presents the findings of the survey conducted among nine English teachers regarding their understanding, reflection, and implementation of deep learning components in classroom practice. The data are displayed in tabular form to provide a clearer overview of teachers' responses, followed by analytical discussions connecting the results to relevant theories and prior research.

Teachers' Understanding of Formative and Summative Assessments

Table 1 presents teachers' responses concerning their understanding of **formative** and **summative** assessments.

Table 1. Teachers’ Understanding of Formative and Summative Assessments (N = 9)

Understanding Level	Frequency (Formative)	Percentage	Frequency (Summative)	Percentage
1 – Not at all	0	0%	0	0%
2 – Slightly understand	0	0%	0	0%
3 – Fairly understand	2	22.2%	2	22.2%
4 – Understand	6	66.7%	6	66.7%
5 – Strongly understand	1	11.1%	1	11.1%

The majority of respondents (66.7%) reported a strong understanding of both formative and summative assessments, while only 22.2% rated themselves at level 3. This indicates that teachers generally possess a sound conceptual grasp of assessment principles, acknowledging their role in evaluating learning progress and outcomes.

This finding reflects teachers’ awareness that assessment serves both *for learning* and *of learning* purposes (Black & Wiliam, 1998). Their high understanding suggests readiness to align assessment practices with deep learning principles, where formative assessment informs teaching adjustments and supports students’ reflective growth. However, the presence of moderate ratings also suggests that practical application may still vary, particularly in designing assessment tasks that measure higher-order thinking skills (HOTS). Continuous assessment literacy training could help ensure consistent practice across classrooms (Mohamed & Rashid, 2022).

Reflective Practice on Lesson Plans

Table 2 summarizes the responses on how often teachers engage in **reflection** on their lesson plans (RP).

Table 2. Teachers’ Reflection on Lesson Plans (N = 9)

Reflection	Frequency	Percentage
1 – Never	0	0%
2 – Rarely	3	33.3%
3 – Sometimes	5	55.6%
4 – Often	1	11.1%
5 – Always	0	0%

Over half of the teachers (55.6%) reported reflecting “sometimes,” while 33.3% admitted doing so “rarely.” Only one teacher (11.1%) reflected “often,” and none reported consistent reflection. These results indicate that reflection is present but not yet habitual among English teachers. Reflection, as described by Schön (1983), is vital for professional growth and pedagogical improvement. Limited reflection could stem from teachers’ heavy administrative duties or lack of structured mentoring opportunities. This pattern echoes Dewey’s (1933) assertion that reflective thinking requires deliberate time and institutional support. In the context of deep learning, reflection helps teachers evaluate whether lessons truly promote student engagement, critical thinking, and meaningful learning (Ismail et al., 2022).

Lesson Plan Revision Following Reflection

Table 3 shows the frequency with which teachers revise their lesson plans as a result of reflection.

Table 3. Teachers’ Revision of Lesson Plans After Reflection (N = 9)

Revision	Frequency	Percentage
1 – Never	0	0%
2 – Rarely	2	22.2%
3 – Sometimes	5	55.6%
4 – Often	2	22.2%
5 – Always	0	0%

The majority of teachers (55.6%) “sometimes” revise their lesson plans, while 22.2% “rarely” or “often” do so. No respondent consistently engages in revision. This finding suggests a gap between reflection and actionable improvement. While teachers may recognize the importance of reflection, follow-through revisions are inconsistent. This aligns with Nhat & Le (2023), who emphasize that reflection must be followed by practical action to result in professional transformation. Deep learning

requires iterative cycles of design, implementation, and revision, ensuring that learning experiences remain meaningful and adaptive to students’ needs (Bal & Öztürk, 2025; Prince, 2023; Ricita et al., 2025).

Teachers’ Perceptions of Deep Learning Implementation

Across survey indicators, teachers demonstrated a generally positive perception of deep learning implementation. They understood the need to integrate the following components:

1. Initial assessment of students’ competence,
2. Alignment with the school’s graduate profile,
3. Learning outcomes using multiple operational verbs (*KKO*),
4. Integration of HOTS, and
5. Creative, student-centered learning media.

These perceptions indicate conceptual readiness, but the earlier findings (Tables 2 and 3) reveal that implementation is still at an emerging stage, with reflection and revision practices not yet consistent.

This mixed pattern aligns with Biggs and Tang’s (2011) *constructive alignment* theory, which asserts that true deep learning occurs when learning objectives, teaching methods, and assessments are coherently aligned. Teachers’ awareness of deep learning concepts demonstrates progress; however, practical translation into classroom practice remains constrained by contextual factors such as time, workload, and limited collaboration (Assaly & Jabarin, 2024; Dima et al., 2021; Valentiyo et al., 2024).

Teachers’ Expectations and Qualitative Insights

Open-ended responses provide additional insights into the contextual challenges teachers face. Table 4 summarizes the major themes derived from the qualitative data.

Table 4. Summary of Teachers’ Expectations and Challenges

Emerging Theme	Representative Responses	Interpretation
Administrative Stability	“Administrative procedures often change, causing difficulty for non-education graduates to adapt.”	Teachers struggle with frequent administrative adjustments that reduce focus on pedagogy.
Comprehensive Supervision	“Supervision should also include TU, Humas, and Kesiswaan, not only classroom teaching.”	Teachers expect holistic evaluation covering the entire school ecosystem.
Professional Development Needs	“Intensive training and mentoring are necessary.”	There is a strong demand for continuous professional development related to deep learning.
Joyful and Meaningful Learning	“I hope to apply various engaging methods and assessments, including games and ice breaking.”	Teachers aspire to design joyful, meaningful learning aligned with <i>BBM</i> principles.
Collaborative Practice	“Regular face-to-face MGMP sessions are needed.”	Teachers recognize the importance of peer collaboration for sustained pedagogical improvement.

These qualitative insights reinforce the quantitative findings: while teachers conceptually understand deep learning, their implementation is limited by systemic and contextual barriers. Sharratt & Fullan (2022) argues that sustainable educational reform requires organizational support, collaborative culture, and ongoing teacher learning. Thus, professional development initiatives should target not only content knowledge but also reflective competence and collaborative inquiry (Aniceto, 2023; Cojorn, 2024; Jamil et al., 2021).

Integrated Discussion

Synthesizing both quantitative and qualitative findings, it is evident that teachers’ awareness of deep learning is relatively high, yet the translation into classroom practice remains inconsistent. Reflection and revision, core aspects of deep learning implementation, are not yet routine. Teachers’ strong understanding of assessment concepts and their positive attitudes toward creative learning provide a foundation for future development. However, several constraints persist:

1. Administrative burdens limiting time for reflection and innovation.
2. Insufficient mentoring systems to connect reflection with lesson redesign.
3. Lack of structured collaboration among teachers for peer coaching and lesson study.

To overcome these challenges, schools should foster collaborative professional learning communities (PLCs) and provide continuous coaching. Such support can transform teachers' reflective insights into tangible instructional improvements. As Darling-Hammond et al. (2021) note, effective deep learning requires teachers who engage in ongoing professional inquiry, guided by institutional support and shared practice (Chen et al., 2025; Zhang et al., 2025).

Summary of Findings

In summary, this study reveals that English teachers possess a solid conceptual understanding of assessment and deep learning principles; however, their reflection and revision practices remain sporadic. Teachers also express a strong need for mentoring, stability, and collaboration. These findings indicate that deep learning implementation is still developing, and strengthening reflective, collaborative, and institutional support is essential to transform conceptual understanding into consistent classroom practice (Y. Liu et al., 2024; Sharma et al., 2023; Xu et al., 2021).

CONCLUSION

This study explored English teachers' perceptions of deep learning implementation in vocational high schools (SMKs) in Semarang, focusing on their understanding, application, and challenges in integrating deep learning principles into classroom practices. Drawing from survey data involving nine teachers, the findings revealed that English teachers hold generally positive perceptions toward deep learning as a pedagogical framework, demonstrating a growing awareness of the importance of higher-order thinking, reflective teaching, and the use of engaging learning media (H. Liu, 2021; Yan, 2021).

Teachers showed strong conceptual understanding in areas such as initial assessment, graduate profile alignment, and HOTS-based learning outcomes, with mean scores ranging from moderate to high. However, the degree of practical implementation varied across respondents. Reflection and revision of lesson plans were practiced occasionally rather than systematically, and collaboration, both within English MGMPs and across vocational subjects, remained inconsistent. These patterns suggest that while teachers have internalized the principles of deep learning, they are still in the process of translating these concepts into sustained pedagogical routines (Aisah, 2020; Tiong & Lee, 2021).

Qualitative insights further revealed key contextual and systemic barriers, including administrative overload, inconsistent supervision, and limited access to professional training. Teachers emphasized the need for ongoing mentoring, peer collaboration, and differentiated supervision to help them embed deep learning more effectively into English instruction. The results confirm that successful implementation requires not only teacher readiness and pedagogical competence but also institutional and policy-level support that fosters continuous learning and innovation among educators (Gori et al., 2023; Høie et al., 2022).

Overall, this research concludes that English teachers in vocational settings are conceptually aligned with the goals of deep learning but require strategic empowerment, through capacity-building, collaborative reflection, and supportive educational ecosystems, to move from awareness to authentic and sustainable practice.

Recommendations

Based on the findings, several recommendations are proposed for teachers, administrators, policymakers, and researchers. English teachers are encouraged to engage in continuous reflection, collaborate with peers across disciplines, and develop creative, context-based digital media to enhance learning engagement. School administrators should provide structured professional development through workshops and mentoring, foster collaborative spaces for lesson planning, and reward innovative teaching practices that embody deep learning principles. Educational policymakers are advised to streamline administrative requirements, integrate deep learning into national teacher training and certification programs, and implement evidence-based, formative supervision to promote instructional improvement. Finally, future research should employ mixed-method or longitudinal designs to examine teachers' evolving perceptions, expand participant diversity for comparative analysis, and incorporate classroom

observations or interviews to gain deeper insights into how deep learning is enacted in authentic teaching contexts. These steps collectively support the sustainable integration of deep learning in English education (Li et al., 2021; Ni et al., 2023).

In conclusion, this study contributes to the growing discourse on deep learning in English language education by highlighting the intersection between teacher perception, classroom practice, and institutional support. While the teachers in this study demonstrate promising awareness and positive attitudes, achieving transformative deep learning requires systematic collaboration, reflective professionalism, and consistent policy alignment. The journey from perception to practice is gradual, but with the right structures in place, English teachers can become pivotal agents of meaningful, conscious, and joyful learning in Indonesian classrooms (Y. Liu et al., 2022; Wu et al., 2020).

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