

## **Integrating Deep Learning and Contextual Learning Teaching: Fostering Motivation and Sustainability in Bilingual Education**

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### **ABSTRACT**

Student motivation remains a persistent challenge in 21st-century education, particularly in bilingual classroom contexts where linguistic diversity and instructional relevance intersect. While previous studies have examined deep learning approaches and contextual learning strategies separately, limited attention has been given to their integrated application in addressing motivational challenges within authentic classroom settings. Responding to this gap, this qualitative case study explores how the integration of Deep Learning and Contextual Learning Teaching (CLT) enhances student motivation and engagement in a bilingual elementary classroom in Indonesia. Data were generated through systematic classroom observations and supported by a literature-informed analytical framework. The findings indicate that combining conceptual depth with contextualized learning tasks fosters active participation, intrinsic motivation, and reflective learning practices. Students demonstrated increased curiosity, collaborative interaction, and ownership of learning when instructional activities emphasized understanding, application, and reflection within meaningful real-life contexts. This study contributes to ELT pedagogy by illustrating how integrative instructional design can support sustainable and inclusive learning environments in bilingual education.

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**Keywords:** Deep Learning; Contextual Learning Teaching; Student Motivation; Bilingual Classroom; Sustainable Education

### **1. INTRODUCTION**

Education in the 21st century is increasingly shaped by demands for learner engagement, critical thinking, and adaptability in response to rapid social, technological, and linguistic changes. Among these challenges, student motivation remains a central concern, particularly in bilingual classroom contexts where learners must navigate conceptual understanding alongside varying levels of language proficiency.

In the Indonesian educational context, large-scale assessments such as the Programme for International Student Assessment (PISA) have highlighted persistent issues related to student engagement and learning motivation. These challenges are frequently associated with teacher-centered instructional practices that emphasize content transmission rather than active meaning-making, resulting in learning experiences that feel abstract and disconnected from students' lived realities.

Deep Learning emphasizes conceptual depth, higher-order thinking, and reflective learning processes. Rather than focusing on surface-level memorization, this approach encourages learners to understand underlying principles, apply knowledge across contexts, and reflect on their learning experiences. Complementing this perspective, Contextual Learning Teaching (CLT) highlights the importance of relevance by situating learning within authentic, real-life contexts that students can readily relate to.

Although both Deep Learning and CLT have been widely discussed in educational research, they are often examined in isolation. Limited empirical attention has been given to their combined implementation, particularly in bilingual classroom settings where motivation and engagement are persistent challenges. This study addresses this gap by examining how the integration of Deep Learning and Contextual Learning Teaching can enhance student motivation and support meaningful, inclusive learning.

From a theoretical perspective, this study is grounded in constructivist and situated learning theories, which emphasize active knowledge construction, social interaction, and contextualized meaning-making. By integrating conceptual depth with contextual relevance, the study demonstrates how instructional design can simultaneously support cognitive development and learner motivation in bilingual education contexts.

## **2. RESEARCH METHOD**

This study employed a qualitative case study design to explore how the integration of Deep Learning and Contextual Learning Teaching (CLT) influences student motivation and engagement in a bilingual elementary classroom. A case study approach was selected to enable an in-depth examination of instructional practices and learner responses within an authentic educational setting.

The research was conducted at an international elementary school in Yogyakarta, Indonesia. Participants consisted of 23 students in a bilingual classroom with varying levels

of English proficiency. Data were collected over a two-month period through systematic classroom observations supported by an observation rubric and reflective field notes.

Data were analyzed thematically, focusing on patterns related to student motivation, participation, collaboration, and reflective learning. To enhance trustworthiness, prolonged engagement in the research setting and triangulation between empirical observations and theoretical perspectives were employed.

### **3. FINDINGS AND DISCUSSION**

Classroom observations revealed a noticeable increase in student participation and engagement following the integration of Deep Learning and CLT. Students demonstrated greater confidence in expressing ideas, more frequent peer interaction, and sustained attention during learning activities. These findings are consistent with previous classroom-based research indicating that learner-centered and project-oriented instructional designs enhance student motivation and active engagement by promoting authentic learning experiences and learner autonomy (Dzulkurnain et al., 2024).

Contextualized tasks enabled students to connect learning content with their everyday experiences, reducing abstraction and supporting comprehension across varying levels of language proficiency. Reflection activities further encouraged students to articulate their understanding and recognize the relevance of learning beyond the classroom. These findings highlight the role of instructional design in shaping motivation, rather than viewing motivation solely as an individual learner trait.

### **4. CONCLUSION**

This study demonstrates that integrating Deep Learning and Contextual Learning Teaching can effectively enhance student motivation, engagement, and reflective learning in bilingual classrooms. By aligning conceptual depth with contextual relevance, educators can create learning environments that are inclusive, meaningful, and sustainable. Although the study is limited to a single classroom context, it offers valuable pedagogical insights and provides a foundation for future research on integrative instructional approaches in ELT settings.

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