

Active Learning Approach on Higher-Order Thinking Skills: Teachers' Perspective in the Elementary Grades

Jane T. Carillo¹

¹Rizal Memorial Colleges, Inc

Publication Date: 2025/06/07

Abstract: This phenomenological research uncovered the opinions and difficulties of elementary teachers in integrating active learning to develop higher order thinking skills (HOTS) of students in Sta. Ana District, Davao City. Purposively selected to describe their experience, viewpoints and challenges in relation to how active learning contribute to the higher order thinking skills of learners were Twelve (12) teacher-participants. There were 2 main themes identified based on the educators' view of active learning as a pedagogical strategy to develop the critical thinking and problem-solving skills of learners such as active learning develops critical thinking and problem-solving skills and it boost engagement and retention. But on the issue of teacher challenges in implementing active learning in the classroom, the themes were lack of time and resources, and classroom management problems demotivated teachers in giving it a try. This study provided a comprehensive examination of the perspective and challenges of teachers face when implementing active learning to foster higher-order thinking skills (HOTS) in elementary learners. To overcome these barriers the research drew insights recommending to provide institutional support and conduct professional development trainings to teachers on active learning approach.

Keywords: Active Learning Approach, Higher-Order Thinking Skills, Teachers' Perspective, Elementary Grades.

How to Cite: Jane T. Carillo (2025). Active Learning Approach on Higher-Order Thinking Skills: Teachers' Perspective in the Elementary Grades. *International Journal of Innovative Science and Research Technology*, 10(5), 3782-3785. <https://doi.org/10.38124/ijisrt/25may2052>

I. INTRODUCTION

Modern education highly values active learning, which boosts student participation and sharpens their critical thinking skills. This study seeks to understand how elementary teachers can effectively integrate active learning methods, promoting critical thinking and creativity in young learners.

Munna and Kalam (2021) posited that education globally traditionally adopted a one-size-fits-all approach, but more recently, instructors worldwide have started to shift gears. Unfortunately, this conventional teaching style often failed to capture students' attention, holding back their critical thinking and problem-solving skills from blossoming, crucial for both academic and professional success. Active learning, however, has been seen as a game-changer. It engages students more, fosters deeper critical thinking, and boosts problem-solving capabilities.

Moreover, Amare and Dagnew (2020) found that while teachers have tried active learning in their classrooms, it's not a standard practice. The analysis of data showed that active learning methods were used, but not consistently or uniformly. In Nigerian schools, Mohammed, A.& Jimoh, S.

(2024) suggested that interactive learning approaches like questioning and peer-to-peer teaching significantly boost students' Economics grades. Teachers can enhance this impact by inspiring curious discussions and concept-sharing among students, creating a dynamic and engaging classroom atmosphere.

Interestingly, a study by Karkkulainen, Barbosa, and Niinimäki (2022) found that educators in Belgium and Finland share a common sentiment that active learning methods bring many benefits to the teaching process. By incorporating active learning methods, students become more engaged, focused, and driven to learn. However, implementing these methods can be hindered by constraints such as a lack of time for planning, the need for extra preparation, and the challenge of adapting to students and parents who resist active learning, as well as difficulties in classroom management and leveraging digital tools effectively.

Locally, in Sorsogon, Balaoro (2024) affirmed that active learning methods, such as hands-on experiments and group discussions, enhance students' understanding and retention of scientific principles. In Davao City, Sonsona (2024) disclosed active learning strategies are effective in

enhancing student engagement and academic performance in elementary education and require educational reforms and teacher support for successful implementation.

Moreover, DepEd Order No. 10, series of 2024, which outlined the Policy Guidelines for the MATATAG Curriculum, Teachers are now required to use engaging methods and strategies that encourage learners to take an active role in their education. This directive aligns with Section 5(e) of RA 10533, emphasizing the importance of constructivist, inquiry-based, reflective, collaborative, and integrative approaches in teaching. These strategies are crucial for creating meaningful learning experiences and helping students develop holistically.

Unfortunately, while active learning holds great promise for Philippine classrooms, its implementation remains limited. Widespread implementation is still in its early stages, leaving much untapped potential (Balaoro, 2024). Meanwhile, Miller and Metz (2014) as cited in Snow (2021) discloses that students perceive active learning methods, such as educational games and problem-solving, as more effective, but teachers predominantly use lectures as their main teaching method.

In our school, teachers recognize the critical importance of active learning in enhancing not only students' academic performance but also their higher-order thinking skills. However, traditional teaching methods remain prevalent due to various challenges, which this study seeks to investigate. Understanding teachers' perspectives and the obstacles they face in implementing active learning is essential, especially as they strive to align with government policies promoting engaging pedagogical approaches. This study is socially relevant as it navigates opportunity to strengthen active learning strategy to develop the higher-order thinking skills of young Filipinos making them equipped with 21st-century competencies, ensuring they are prepared for the demands of the modern world.

II. METHOD

This study used a phenomenological research approach to delve into teachers' thoughts on how active learning enhances students' critical thinking abilities. By exploring the teachers' firsthand experiences, the study aimed to uncover the true meanings they associated with active learning in the classroom. The researchers sought to reveal the natural, unvarnished perspectives of educators on this teaching method, including how it affects their daily practices and how effective they believe it to be. The primary goal was to gain a more in-depth understanding of the real-life experiences of teachers and the specific circumstances that influence their views. By doing so, this approach highlighted the unique aspects of teachers' lived experiences and the diversity of their perspectives on active learning, as previously noted by Tomaszewski et al. (2020), referencing Flood (2010).

In this study, participants shared their personal thoughts and experiences about the phenomenon being investigated, with a strong focus on their emotions, perspectives, and

attitudes. Data was collected through in-depth interviews, allowing participants to openly express themselves. The researcher engaged twelve (12) elementary grade teachers from the Sta. Ana District in Davao City, who had at least three years of experience teaching in public elementary schools and worked at intermediate levels. They served as informants of this study. According to Denzin & Lincoln (2000), as cited in Dunwoody, Macaulay, and Newman (2023), interviews offered participants the opportunity to express their emotions, biases, viewpoints, aspirations, and attitudes toward various phenomena encountered in the workplace or other organizational settings.

In my study, I used purposive sampling to pick participants with the specific traits relevant to my research. Chun et al. (2019), as cited in Mwitwa (2022) articulated that this method is often the frequently preferred option, especially for in-depth qualitative studies, as it allows researchers to target data-rich cases that can provide valuable insight. Further, my study prioritized the ethical principles of informed consent, confidentiality, and participant autonomy to create a safe and non-judgmental environment. My goal was to minimize potential risks and ensure participants felt comfortable sharing their insights. As a researcher, I carefully designed the research, conducted in-depth interviews with teachers, and analyzed the data to understand their approaches in diverse classrooms. The information gathered from teachers about using active learning to enhance critical thinking was thoroughly analyzed and processed.

For the purposes of this study, I chose Thematic Content Analysis which is a process that required careful reading and re-reading of the transcripts to unveil the themes (King 2004 as cited in Dawadi 2020). Also, this study observed the data analysis of O'Connor and Gibson's (2003), where data is organized, grouped, and integrated into main themes ensuring the integrity and authenticity of the results. Further, in order to verify the credibility and trustworthiness of the findings in this research, this study applied environmental triangulation which encompasses comparison and integration of perspectives across different settings to enhance validity. As Vivek (2023) stated environmental triangulation was a methodological technique that required data collection from several locations to improve the validity and dependability of qualitative data.

III. RESULTS AND DISCUSSIONS

The following section presents the findings of the study on teachers' perspectives and challenges regarding the use of active learning to develop higher-order thinking skills (HOTS) among elementary grade learners. Similarly, the study's insights are shown providing a deeper understanding of how active learning can be effectively integrated into elementary classrooms. Below are the key themes of this study.

➤ *Develops Critical Thinking and Problem-Solving Skills.*

The participants highlighted active learning strategies as a key driver for developing higher-order thinking skills (HOTS) among elementary learners. Participants emphasized

how active learning strategies, directly impacting students' ability to analyze, evaluate, and apply knowledge in meaningful ways. The narrations explicitly revealed that that teachers perceive active learning as a highly effective strategy for boosting both student engagement and knowledge retention

The findings of this study are strongly supported by studies. Fazio et al., (2021), referencing Bonwell and Eison (1991), argued that active learning requires students to engage in higher-order cognitive processes through activities like problem-solving and discussion, leading to deeper understanding and better retention compared to passive learning. Dzaiy and Abdullah (2024), citing Freeman et al. (2014), showed empirical evidence through meta-analyses showing that active learning approaches increase exam scores by an average of 6% across disciplines while significantly improving student engagement.

➤ *Boost Engagement and Retention.*

Boost Engagement and Retention is another theme that emerged from the narrations of participants perspective on active learning. Active learning powerfully boosts engagement and retention by transforming students from passive listeners into active participants through hands-on, collaborative, and experiential tasks. Teacher-participants highlighted that this approach ignites motivation, sustains attention, and solidifies long-term learning by making lessons memorable and personally meaningful. The participants' narrations explicitly revealed that that teachers perceive active learning as a highly effective strategy for boosting both student engagement and knowledge retention.

In support to the theme, Nurbavliyev, Kaymak, and Sydykov's (2022) confirmed that active learning classrooms demonstrate greater academic productivity and student achievement than traditional lecture-based settings. Also, Zandstra (2023) emphasized how hands-on active learning strategies like role-play and peer teaching create more engaging classroom environments that promote both immediate participation and long-term knowledge retention through real-world application and immediate feedback.

However, while active learning effectively develops higher-order thinking skills, teachers faced significant challenges in its implementation. The challenges of teachers in using active learning were found to critically impact teachers' ability to effectively integrate active learning approaches. Here are the themes on the challenges of teachers in using active learning in the classrooms.

➤ *Time and Resource Constraints.*

Based on the participants' narrations, time constraints and resource limitations are major challenges in implementing the active learning approach. They emphasized that active learning requires significantly more preparation and classroom time compared to traditional methods, particularly when managing large class sizes and complex assessments. Also, they stressed limited resources as a key obstacle, citing a lack of access to materials, technology, and suitable learning spaces.

The findings on the time and resource constraint as challenges in active learning strategies is highlighted in Gholami et al. (2023) and Karkkulainen et al. (2022). They shed light on the challenges of time and resource constraints in active learning strategies. Their findings support the notion of time pressures, limited resources, and curriculum expectations, echoing the participants' difficulties with preparation time and a lack of necessary materials.

➤ *Classroom Management Difficulties.*

Classroom management poses a significant challenge when implementing active learning, as interactive activities often increase noise levels and student movement. Teachers report difficulties in maintaining focus and equitable participation during group work or hands-on tasks, especially in larger classes. The findings of this study are strongly supported by studies. Karkkulainen, Barbosa and Niinimäki, (2022) directly supported participants' concerns about overcrowding and space constraints. Identification of classroom management as a primary challenge, particularly regarding digital tools and student adaptation, parallels teachers' reported struggles with maintaining focus during technology-based or movement-heavy activities.

As a result, the study offers insights into the perspectives and challenges of teaching with active learning to enhance learners' higher order thinking skills, such as providing institutional support and conducting professional development trainings. The insights from the study convincingly suggest that enhancing active learning in classrooms necessitates a dual strategy of strong institutional support and extensive professional development. To reiterate, this analysis contends that the successful realization of active learning is contingent upon two equally significant components operating collaboratively. First, educational institutions should furnish strong institutional support through practical initiatives such as dedicated planning time, teaching resources, and collaborative systems. Second, educators require continuous, high-quality professional development that equips them with both active learning methodologies and classroom management skills to effectively facilitate student-centered learning experiences.

Overall, the study found that elementary teachers recognize active learning's effectiveness in developing higher-order thinking skills but encounter implementation challenges including time constraints, resource limitations, and classroom management difficulties. Existing research corroborates these findings while demonstrating that such barriers can be addressed through institutional support systems and targeted professional development programs. These findings underscore the necessity of combining organizational support structures with teacher capacity-building initiatives to facilitate successful active learning implementation in elementary classrooms.

REFERENCES

- [1]. Amare, Y. & Dagne A. (2020). Teachers' perceptions, practices and challenges of active learning strategies utilisation at secondary schools in

- Ethiopia. Contemporary Educational Researches Journal. 10(3), 97–108. <https://doi.org/10.18844/cej.v10i3.4846> .
- [2]. Balaoro (2024) Enhancing Scientific Skills Among Students Through Engaging in Active Learning Activities. United International Journal for Research & Technology (UIJRT). 5(7). 242-251.
- [3]. DepEd Order 10, series 2024, Policy Guidelines of the MATATAG Curriculum
- [4]. Dzaiy, A H and Abdullah, S A (2024) he Use of Active Learning Strategies to Foster Effective Teaching in Higher Education Institutions. ZANCO Journal of Humanity Sciences (ZJHS). https://www.researchgate.net/publication/380889377_The_Use_of_Active_Learning_Strategies_to_Foster_Effective_Teaching_in_Higher_Education_Instituti ons
- [5]. Fazio, C., Carpineti, M., Faletič, S. & Giliberti, M. (2021) Strategies for Active Learning to Improve Student Learning and Attitudes Towards Physics. DOI:10.1007/978-3-030-78720-2_15.
- [6]. Gholami, R., et al. (2023). Challenges in Active Learning Implementation: Insights from Teachers' Experiences. Educational Research Quarterly.
- [7]. Karkkulainen, Evelyn & Barbosa, Líbia & Niinimäki, Jukka. (2022). Finnish and Belgian University of Applied Sciences Teacher Students' Perspective on Active Learning Methods. https://www.researchgate.net/publication/376721881_Finnish_and_Belgian_University_of_Applied_Sciences_Teacher_Students'_Perspective_on_Active_Learning_Methods
- [8]. Mohammed, A.& Jimoh, S. (2024) Predictive role of Active Learning Strategies on learning Outcomes in Economics Among Public Secondary Students in Lagos State, Nigeria. LASU International Journal of Arts and Social Science Education. 2 (1). <http://www.lijassed.org>.
- [9]. Munna, A S & Kalam, M A (2021). Impact of Active Learning Strategy on the Student Engagement. GNOSI: An Interdisciplinary Journal of Human Theory and Praxis,4 (2). <https://files.eric.ed.gov/fulltext/ED614302.pdf>.
- [10]. Mwita, K. (2022) Factors influencing data saturation in qualitative studies. International Journal of Research in Business & Social Science 11(4) (2022), 414-420. <https://doi.org/10.20525/ijrbs.v11i4.1776>.
- [11]. Dawadi (2020). Thematic Analysis Approach: A Step by Step Guide for ELT Research Practitioners. Nepal English Language Teachers' Association. 25. 1-2. <https://files.eric.ed.gov/fulltext/ED612353.pdf>
- [12]. Dunwoodie, K., Macaulay, L., & Newman, A. (2023). Qualitative interviewing in the field of work and organisational psychology: Benefits, challenges and guidelines for researchers and reviewers. Applied Psychology: An International Review, 72(2), 863–889. <https://doi.org/10.1111/apps.12414>
- [13]. Republic Act (RA) 10533 is also known as the Enhanced Basic Education Act of 2013
- [14]. Snow, M. (2021) Faculty and Student Perceptions of Active Learning. https://www.researchgate.net/publication/363863591_Perceptions_and_Barriers_to_Active_Learning
- [15]. Sonsona (2024) Active Learning Approach and Academic Interest of Learners in Calinan District, Davao City. International Journal Of Progressive Research In Engineering Management And Science. 4 (10). https://www.ijprems.com/uploadedfiles/paper//issue_10_october_2024/36262/final/fin_ijprems1728919981.pdf
- [16]. Tomaszewski, L.E, Zarestky, J. & Gonzalez, E. (2020) Planning Qualitative Research: Design and Decision Making for New Researchers. International Journal of Qualitative Methods Volume 19: 1–7. DOI: 10.1177/1609406920967174