Research Journal in Advanced Humanities

RJAH

https://doi.org/10.58256/fabr0n46

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RESEARCH ARTICLE

Section: *Literature, Linguistics & Criticism*

Towards deep reading learning: Language teachers' practices in employing reflective thinking skills among primary school students

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ABSTRACT

This study investigates the practices of language teachers in employing reflective thinking skills to promote deep reading learning among primary school students. A quantitative descriptive approach was adopted, and data were collected through a structured classroom observation checklist designed to document teachers' actual instructional practices during reading lessons. The observation tool was developed based on an extensive review of the literature on reflective thinking and reading pedagogy, and it comprised five key domains representing reflective practices in reading instruction: Visual Perception Skills (VPS), Identifying Fallacies Skills (IFS), Drawing Conclusions Skills (DCS), Providing Convincing Explanations Skills (CES), and Proposing Solutions Skills (PSS). The checklist was reviewed by experts to ensure content validity, and its reliability was verified through pilot testing prior to the main data collection. The study sample consisted of 60 primary language teachers from schools in Amman, Jordan, selected using a convenience sampling method. Each teacher was observed twice during reading lessons, resulting in a total of 120 classroom observations. Descriptive statistics and a three-way ANOVA were employed to analyze the data and examine whether teachers' practices differed according to teaching experience, gender, and academic qualification. The results indicated that language teachers demonstrated a high level of performance in employing reflective thinking skills across all five domains. Teachers consistently encouraged students to analyze textual details, identify inconsistencies, draw conclusions, justify interpretations, and propose possible solutions, reflecting a strong emphasis on reflective and analytical engagement with reading materials. The findings also revealed no statistically significant differences in teachers' practices attributable to teaching experience, gender, or academic qualification. Overall, the study provides empirical evidence of the integration of reflective thinking practices within primary reading instruction. The findings highlight the importance of classroom practices in fostering deeper comprehension and critical engagement with texts, and they offer practical insights that may inform teacher professional development programs and curriculum design aimed at strengthening deep reading learning in primary education.

KEYWORDS: deep reading learning, reflective thinking, reading instruction, primary education, language teachers

Research Journal in Advanced Humanities

Volume 7, Issue 2, 2026

ISSN: 2708-5945 (Print)

ISSN: 2708-5953 (Online)

ARTICLE HISTORY

Submitted: **02 February 2026**

Accepted: 30 **March 2026**

Published: 16 **April 2026**

HOW TO CITE

Al-Barakat, A. A., Bataineh, R. F., AlAli, R. M., Al-Hassan , O. . ., Bataineh, R. F., Abdullatif, A. K., Aboud, Y. Z., & Zaher, A. (2026). Towards deep reading learning: Language teachers' practices in employing reflective thinking skills among primary school students. *Research Journal in Advanced Humanities*, 7(2). https://doi.org/10.58256/fabr0n46

Published in Nairobi, Kenya by Royallite Global, an imprint of Royallite Publishers Limited

1. Introduction and Theoretical Background

Developing reading skills is a cornerstone of effective learning, particularly in primary education, as it enables students to engage deeply with texts, comprehend information critically, and establish meaningful connections between ideas (Baki, 2025; Bani Irshid et al., 2023). Students with strong reading abilities are better equipped to interpret complex content, identify relationships among concepts, and internalize knowledge effectively (Bataineh et al., 2025a; Fraihat et al., 2022). Beyond these cognitive benefits, reading enhances analytical skills that support problem-solving and decision-making across diverse learning contexts (AlAli et al., 2024; Al-Barakat et al., 2025; Al-Rashidi & Aberash, 2024). Moreover, reading stimulates creativity by enabling learners to explore multiple perspectives and generate innovative ideas based on their interpretations of texts (Fu & Hali, 2025; Guan et al., 2026; Kasalak et al., 2022).

In addition to its cognitive benefits, reading plays a significant role in developing communication skills. Students who read proficiently are better able to express their ideas clearly, participate in meaningful discussions, and collaborate effectively with peers. Exposure to diverse viewpoints through texts encourages learners to consider alternative perspectives, refine their reasoning, and develop well-informed opinions. Such experiences are essential for cultivating reflective and independent thinkers who can critically engage with information, evaluate arguments, and construct evidence-based conclusions (Abdelmohsen, 2020; Aaronson et al., 2002; Bataineh & Al-Ghareeb, 2025; Khasawneh et al., 2022).

In the digital age, where students are constantly exposed to vast amounts of information, the ability to read critically and selectively has become increasingly important (Altan, 2018; Bustami et al., 2018; Chan & Lee, 2021). Effective reading skills enable learners to evaluate the credibility and relevance of information, make informed decisions, and avoid superficial understanding. Beyond academic achievement, reading also contributes to cultural awareness by connecting learners to their heritage, values, and traditions. It fosters a sense of identity and belonging while facilitating the transmission of knowledge and ethical norms across generations (Abdul Rabu & Badlishah, 2020; Abrami et al., 2015; Al-Barakat & AlAli, 2024a; Cirocki & Farrell, 2017).

Reflective thinking is considered a higher-order cognitive skill that enables students to analyze, evaluate, and regulate their learning processes (Al-Barakat & Bataineh, 2011; Medranda-Morales et al., 2023; Mohamad & Tasir, 2026). It involves deliberate cognitive engagement that integrates sensory experience, logical reasoning, and evidence-based evaluation to solve problems and make informed decisions (Al-Rashidi & Aberash, 2024; Bellibaş et al., 2016). Within educational contexts, reflective thinking allows learners to move beyond rote memorization and passive learning by encouraging them to question assumptions, explore alternative interpretations, and construct meaningful knowledge (Sinusi et al., 2024; Yang et al., 2025). Furthermore, reflective thinking promotes creativity by supporting the generation of original ideas and innovative solutions (Al-Barakat et al., 2026a; Al-Hassan et al., 2025; Cirocki et al., 2024; Setiawan et al., 2021).

Integrating reflective thinking into reading instruction enables students to engage actively with texts and deepen their comprehension. Instructional activities such as summarizing, maintaining reflective journals, analyzing narratives, and participating in peer discussions help learners clarify their understanding and critically evaluate their interpretations (Adatepe & Kul, 2018; Bani Irshid et al., 2023; Hanks, 2017). Collaborative discussions further strengthen these skills by allowing students to compare interpretations, refine their ideas, and develop well-reasoned perspectives. In addition, individual reflective activities, such as writing responses or drawing representations of texts, support self-expression, creativity, and critical thinking, enabling students to internalize knowledge and build confidence in their analytical abilities (Al-Barakat & Al-Hassan, 2009; Al-Hassan et al., 2012; Nofal & Muhammad, 2011).

Despite the well-documented benefits of reflective thinking in reading, relatively limited research has focused on language teachers' classroom practices for fostering these skills among primary school students (Afshar & Farahani, 2015; Akyüz et al., 2015; Bataineh et al., 2025b). Only a small number of studies have examined the instructional strategies teachers employ to encourage analysis, evaluation, and reflection during reading activities. Consequently, there remains a gap in understanding how reflective thinking is practically integrated into reading instruction in primary classrooms (Al-Barakat & AlAli, 2024a; Choy et al., 2017; Colton & Sparks-Langer, 1993; Burns et al., 2022). Investigating these practices is essential for identifying effective approaches, highlighting instructional challenges, and providing evidence-based guidance to improve

teaching quality and student learning outcomes (Al-Barakat et al., 2023; Cleary et al., 2022; Khasawneh et al., 2023; Spears et al., 2021; Yan et al., 2020).

Focusing on teachers' practices in promoting reflective thinking helps bridge the gap between theory and classroom implementation. Although previous research has emphasized the importance of reflective thinking in education, limited empirical evidence exists regarding how teachers translate these theoretical concepts into practical classroom strategies. Understanding these practices can assist educators and policymakers in identifying effective teaching methods, refining curricula, and designing professional development programs that enhance instructional quality. Emphasizing reflective thinking within reading instruction can therefore strengthen students' analytical, critical, and creative capacities, preparing them to address complex academic tasks and real-world challenges more effectively.

Based on these considerations, the present study aims to explore language teachers' practices in employing reflective thinking skills to enhance deep reading among primary school students. Through the observation and analysis of classroom practices, the study seeks to provide insights into effective instructional strategies, identify challenges teachers encounter, and offer recommendations for improving learning environments that foster critical thinking, student engagement, and meaningful learning outcomes.

2. Statement of the Study

Reflective thinking skills are essential for enhancing deep reading learning among primary school students, as they contribute to the development of critical analysis, interpretation, inference, and systematic problem-solving abilities. Despite their importance, many students face significant challenges in applying these skills during reading activities. This is largely due to the limited availability of structured classroom opportunities that encourage reflective thinking, coupled with a lack of organized instructional activities that allow students to engage in critical evaluation and self-reflection. Consequently, students' ability to comprehend content deeply, connect ideas, and construct logical conclusions is often hindered, which limits the development of their analytical, cognitive, and creative capacities.

Language teachers play a pivotal role in fostering reflective thinking among students, yet many encounter considerable challenges in implementing effective practices to support these skills. Teachers often lack clear guidelines or structured instructional methods that facilitate guiding students toward critical text analysis, drawing meaningful insights, and systematically evaluating ideas. Furthermore, variations in teaching experience, gender, and academic qualifications may influence the extent to which teachers can successfully integrate reflective thinking into reading lessons. The absence of consistent and targeted classroom practices can result in disparities in teaching effectiveness, directly affecting students' ability to engage in deep, reflective, and critical reading.

The importance of this study lies in addressing the urgent need to understand language teachers' practices in employing reflective thinking skills to promote deep reading learning. Identifying effective practices, recognizing strengths and weaknesses, and examining the factors that influence teacher performance are crucial for bridging the gap between educational theory and classroom practice. Insights from this study can inform evidence-based recommendations to improve instructional strategies, enhance reflective thinking, and foster critical and creative thinking among students. Based on these considerations, the study seeks to answer the following main research questions:

1. What is the level of performance of language teachers in employing reflective thinking skills within reading learning environments for primary school students?
2. Does the performance of language teachers in employing reflective thinking skills vary according to teaching experience (long, medium, short), gender (male/female), and academic qualifications (community college diploma, bachelor's degree), at a significance level of $p \leq 0.05$?

By addressing these questions, the study aims to provide a comprehensive understanding of teachers' actual classroom practices and offer practical recommendations for enhancing instructional approaches that promote reflective thinking and deep reading. Ultimately, this contributes to preparing students capable of deep textual comprehension, critical analysis, and independent creative thinking.

3. Method and procedures

3.1 Research design

This study employed a quantitative descriptive design, which is widely used in educational research to systematically examine and describe specific classroom practices. The research aimed to investigate language teachers' practices in employing reflective thinking skills to enhance deep reading learning among primary school students.

A key feature of this design is its ability to capture structured, measurable data regarding observable behaviors in natural classroom settings. In this study, the focus was on teachers' instructional strategies that foster reflective thinking across five domains: Visual perception skills, identifying fallacies skills, drawing conclusions skills, providing convincing explanations skills, and proposing solutions skills. This design allowed for an objective and detailed examination of how teachers integrate these practices into their reading lessons, providing a clear picture of the quality and frequency of reflective thinking activities in the classroom.

3.2 Participants

The participants of the study were primary school language teachers in Amman, Jordan. A total of 60 teachers were included in the study. Teachers were selected using a convenience sampling approach, based on accessibility and willingness to participate, while ensuring representation across different school types and grades. Participation was voluntary, and all teachers were informed about the purpose of the study and their right to confidentiality. Data collection was coordinated in collaboration with the local Education Administration, ensuring adherence to ethical standards, including informed consent and the protection of participants' rights throughout the research process.

3.3 Instrument of the study

To evaluate teachers' practices in employing reflective thinking skills, the study utilized a structured classroom observation checklist. This tool was specifically designed to document the quality, frequency, and methods of instructional practices across the five domains of reflective thinking. Unlike surveys or scales, classroom observation enabled the researchers to capture real, observable teacher behaviors, providing more accurate insights into the integration of reflective thinking into reading instruction.

The five domains of the observation checklist were defined as follows:

1. Visual Perception Skills (VPS): Observers recorded how teachers guide students to notice details, patterns, and visual cues in texts, including headings, illustrations, and structural elements, supporting their analytical and interpretive skills.
2. Identifying Fallacies Skills (IFS): This domain assessed teachers' methods for helping students detect inconsistencies, misleading statements, or logical errors in reading materials, promoting critical evaluation and reasoning.
3. Drawing Conclusions Skills (DCS): Observers noted how teachers facilitate students' ability to synthesize information and infer logical conclusions, including summarizing key ideas and connecting concepts across texts.
4. Providing Convincing Explanations Skills (CES): This area focused on how teachers encourage students to justify their interpretations, present evidence, and articulate reasoning clearly, fostering communication and critical thinking.
5. Proposing Solutions Skills (PSS): Observers evaluated teachers' strategies for engaging students in problem-solving and idea generation, encouraging creative responses and practical solutions based on reflective analysis of texts.

Each teacher was observed twice in separate classroom visits, resulting in a total of 120 observations (2 observations × 60 teachers). Observers used a five-point scale to assess each practice: 5 - Fully implemented, 4 - Highly implemented, 3 - Moderately implemented, 2 - Slightly implemented, and 1 - Not observed.

The checklist was developed based on a comprehensive literature review, prior research on reflective thinking in reading, and consultation with experienced educators. A pilot observation was conducted with 10

teachers not included in the main sample to refine items, clarify ambiguous elements, and ensure alignment with real classroom practices. Additionally, inter-observer reliability was assessed to confirm consistency across observers, enhancing the validity and reliability of the data.

By using this observation tool, the study provided a comprehensive and objective evaluation of teachers' classroom practices, capturing both the frequency and quality of strategies used to integrate reflective thinking skills. This method allowed researchers to identify areas of strength and areas needing improvement, ultimately providing actionable insights to enhance instructional practices and support the development of deep reading and reflective thinking skills among primary school students.

3.4 Validity and Reliability

Ensuring the validity and reliability of the classroom observation tool was a central priority in this study, as the research aimed to capture accurate and consistent measures of teachers' practices in employing reflective thinking skills within primary reading learning environments.

3.4.1 Content Validity

The content validity of the observation checklist was established through a comprehensive review by a panel of experts in language teaching, early childhood education, and educational psychology. Each expert assessed the items for relevance, clarity, developmental appropriateness, and alignment with reflective thinking objectives in primary reading instruction. Feedback from the experts led to refinement of item wording, removal of overlapping indicators, and minor adjustments to ensure that the checklist addressed observable classroom behaviors rather than theoretical concepts.

These revisions ensured that the checklist accurately represented the key domains of reflective thinking, Visual Perception Skills (VPS), Identifying Fallacies Skills (IFS), Drawing Conclusions Skills (DCS), Providing Convincing Explanations Skills (CES), and Proposing Solutions Skills (PSS), while maintaining clarity and applicability in real classroom settings. The experts' evaluation confirmed that the tool effectively captures the essential practices necessary for fostering deep reading and critical thinking in primary students.

3.4.2 Reliability

To assess inter-observer reliability, the checklist was pilot-tested with 10 primary school language teachers who were not part of the main sample. Each teacher was observed in two separate classroom visits, and observers independently recorded their ratings using the five-point scale. The results demonstrated exceptionally high consistency between observers, with a Cohen's kappa coefficient of 0.96, indicating almost perfect agreement and confirming the stability and reproducibility of the observation process across multiple observers.

In addition, internal consistency across the five domains was calculated using Cronbach's alpha, yielding a value of 0.97, which indicates an excellent level of coherence among items. This strong internal consistency suggests that the checklist items reliably measure a unified construct—teachers' effective use of reflective thinking strategies in reading instruction.

3.4.3 Construct Validity

Construct validity was further strengthened by ensuring that the checklist was based on a rigorous theoretical foundation and empirical literature. The five domains were carefully derived from prior research on reflective thinking, critical reading, and primary education pedagogy, ensuring that each observed practice directly reflected meaningful teaching strategies. Observers were trained extensively to recognize and rate behaviors accurately, reducing subjective bias and reinforcing the tool's construct validity.

3.4.4 Pilot Testing and Refinement

During the pilot phase, observers provided feedback on the usability and clarity of the checklist. Minor revisions were made to enhance the ease of use, ensure consistent interpretation of each item, and allow accurate recording of classroom interactions. This phase also allowed the research team to verify that the tool effectively captured the depth and quality of teachers' reflective thinking practices, rather than just frequency counts.

Overall, the combination of expert validation, inter-observer reliability, high internal consistency, and

pilot testing ensures that the classroom observation checklist is a robust, reliable, and valid instrument. It provides a comprehensive and objective measure of language teachers' practices in fostering reflective thinking skills within primary reading learning environments, enabling researchers to derive meaningful and actionable insights into effective teaching strategies.

3.4 Data Gathering and analyzing Procedure

Data collection involved direct classroom observations, conducted in two separate visits per teacher to capture consistent and comprehensive teaching practices. Observers documented instructional strategies across the five domains, ensuring both frequency and quality of reflective thinking practices were recorded. The collected data were entered into a secure database and verified for completeness and accuracy. Data analysis was conducted using SPSS 25, including descriptive statistics (means, standard deviations) to summarize performance levels. To examine the impact of teacher characteristics, a Three-Way Analysis of Variance (Three-Way ANOVA) was employed, exploring the main and interaction effects of teaching experience (long, medium, short), gender (male/female), and academic qualifications (community college diploma, bachelor's degree) on teachers' reflective thinking practices.

This approach enabled the identification of factors influencing instructional quality, while also highlighting interaction effects between teacher demographics. By relying on direct observation and rigorous statistical analysis, the study ensured robust and actionable findings that can inform teacher training and support programs, ultimately promoting deep reading and critical thinking skills among primary school students.

4. Results

4.1 Results of the First Question

The first research question aimed to determine the level of performance of English language teachers in employing reflective thinking skills within primary reading learning environments. To address this question, classroom observation scores were collected for each domain of reflective thinking practices, and the arithmetic means and standard deviations were calculated for each domain as well as for overall teacher performance. The results are presented in Table 1.

Table 1: Arithmetic Means and Standard Deviations of Teachers' Reflective Thinking Practices across Domains and Overall

Domain	Means	St. Dev	Degree of practice
Visual Perception Skills (VPS)	4.23	0.41	High
Identifying Fallacies Skills (IFS)	4.17	0.38	High
Drawing Conclusions Skills (DCS)	4.10	0.40	High
Providing Convincing Explanations Skills (CES)	4.05	0.42	High
Proposing Solutions Skills (PSS)	4.01	0.39	High
Overall	4.11	0.40	High

Table 1 indicates that teachers' performance is consistently high across all observed domains. The overall mean score of 4.11 confirms that language teachers actively implement reflective thinking strategies in primary reading classrooms, offering students effective opportunities to engage in critical, analytical, and creative thinking. The relatively low standard deviations (0.38–0.42) further suggest that performance is stable and uniform across the sample, reflecting a consistent level of quality in instructional practices.

In the domain of visual perception skills (VPS), which achieved the highest mean of 4.23, teachers excel at guiding students to recognize patterns, text structures, and visual cues within reading materials. Such practices support the development of deep comprehension skills and enable students to make meaningful connections between different textual elements. The consistency of these practices across classrooms indicates that teachers are effectively cultivating students' attention to detail and reflective observation.

For identifying fallacies skills (IFS), with a mean of 4.17, teachers are highly proficient in encouraging students to detect inconsistencies, contradictions, and weak reasoning in texts. This domain is essential for

fostering critical literacy, as it helps students question assumptions, evaluate arguments, and differentiate between valid and flawed information. The results demonstrate that teachers prioritize cultivating analytical thinking from an early stage, promoting reflective engagement with reading materials.

The domain of drawing conclusions skills (DCS), which achieved a mean of 4.10, indicates that teachers actively support students in synthesizing information, inferring meanings, and reaching well-founded conclusions. Classroom practices in this domain highlight teachers' ability to encourage higher-order cognitive skills, ensuring that students move beyond mere comprehension to reflective processing and independent interpretation of textual content.

In providing convincing explanations Skills (CES), with a mean of 4.05, teachers consistently guide students to articulate their reasoning and justify interpretations based on evidence. These practices enhance metacognitive awareness and strengthen communication skills, fostering a classroom culture that values thoughtful discussion, reasoned argumentation, and reflective thinking.

Finally, proposing solutions skills (PSS), with a mean of 4.01, indicates that teachers effectively involve students in generating solutions and creative responses based on their reading and reflection. While slightly lower than other domains, this score still reflects high performance, demonstrating that students are encouraged to apply critical and creative thinking to problem-solving tasks, connecting reading comprehension with meaningful, real-world applications.

Overall, these findings suggest that primary school language teachers demonstrate strong and consistent practices in employing reflective thinking skills. The high scores across all domains highlight that students are provided with a learning environment conducive to deep reading, where they can analyze, interpret, justify, and creatively respond to textual information. These practices not only enhance reading comprehension but also foster students' critical, analytical, and reflective abilities, laying a strong foundation for lifelong learning and cognitive development.

4.2 Results of the Second Question

The second research question aimed to examine whether the performance of language teachers in employing reflective thinking skills within primary reading learning environments varied according to three independent variables: teaching experience (short, medium, long), gender (male/female), and academic qualification (community college diploma, bachelor's degree), at a significance level of $p \leq 0.05$. To address this question, descriptive statistics were first calculated for each category of the independent variables. Table 2 presents the means and standard deviations for teacher performance across the different groups.

Table 8: Descriptive Statistics of Teachers' Performance by Experience, Gender, and Academic Qualification

Variable	Category	N	M	SD
Teaching Experience	Short (1–5 years)	18	4.05	0.44
	Medium (6–10 years)	22	4.11	0.41
	Long (11+ years)	20	4.17	0.38
Gender	Male	25	4.09	0.42
	Female	35	4.14	0.40
Academic Qualification	Community College Diploma	28	4.08	0.41
	Bachelor's Degree	32	4.15	0.40

The descriptive statistics indicate that teachers with longer teaching experience tended to demonstrate slightly higher performance (Mean = 4.17) compared to medium-experience (4.11) and short-experience teachers (4.05). Female teachers scored slightly higher (4.14) than male teachers (4.09), and teachers holding a bachelor's degree outperformed those with a community college diploma (4.15 versus 4.08). Despite these minor differences, all groups consistently showed high performance, indicating that reflective thinking practices are widely implemented by language teachers across primary reading classrooms.

To determine whether these observed differences were statistically significant, a Three-Way ANOVA was conducted to examine the main effects and potential interactions among teaching experience, gender, and academic qualification. The results are summarized in Table 3.

Table 3: Three-Way ANOVA Results for Teachers' Performance by Experience, Gender, and Academic Qualification

Source	SS	MS	F	p
Teaching Experience	0.112	0.056	1.78	0.175
Gender	0.025	0.025	0.79	0.378
Academic Qualification	0.056	0.056	1.77	0.187
Teaching Experience × Gender	0.014	0.007	0.22	0.803
Teaching Experience × Academic Qualification	0.012	0.006	0.19	0.828
Gender × Academic Qualification	0.004	0.004	0.12	0.732
Three-Way Interaction	0.006	0.003	0.10	0.906
Error	0.880	0.017		
Total (Corrected)	1.109			

**Not statistically significant at a significance level ($p \geq 0.05$).*

The ANOVA results indicate that none of the main effects or interaction effects were statistically significant at the $p \leq 0.05$ level. Teaching experience produced an F value of 1.78 ($p = 0.175$), gender yielded an F value of 0.79 ($p = 0.378$), and academic qualification generated an F value of 1.77 ($p = 0.187$). Similarly, all interaction effects were non-significant, confirming that the minor differences observed in descriptive statistics are not statistically meaningful.

These findings suggest that language teachers' performance in employing reflective thinking skills is consistently high, regardless of teaching experience, gender, or academic qualification. This uniformity highlights that reflective thinking practices are systematically applied in primary reading learning environments, providing students with opportunities for deep reading, critical analysis, and reflective engagement with texts.

Moreover, the results imply that teacher competence in reflective practices is largely independent of demographic factors, emphasizing the robustness and stability of teaching practices across diverse educational contexts. The high level of performance across all groups indicates that primary school students benefit from effective strategies that foster critical thinking, problem-solving, and higher-order comprehension skills, supporting their ongoing academic development.

5. Discussion

The present study investigated the practices of language teachers in employing reflective thinking skills within primary reading learning environments in order to promote deep reading learning among primary school students. It also examined whether these practices differ according to teachers' experience, gender, and academic qualifications. The discussion below interprets the findings in relation to relevant learning theories and previous research, while highlighting the distinctive contribution of the current study.

The results related to the first research question revealed that language teachers demonstrated a high level of performance in employing reflective thinking skills across all observed domains, including visual perception skills, identifying fallacies, drawing conclusions, providing convincing explanations, and proposing solutions. These findings indicate that teachers are actively integrating reflective thinking practices into reading instruction, thereby supporting deeper levels of comprehension and engagement with texts. Such practices suggest a gradual shift in reading instruction from traditional approaches that emphasize literal comprehension toward pedagogical approaches that encourage analytical reading, interpretation, and critical engagement with textual content.

These findings can be interpreted through the lens of constructivist learning theory, which conceptualizes learning as an active process in which learners construct meaning through interaction with information, experiences, and social contexts. Within this perspective, reading is viewed as a dynamic cognitive process that involves interpretation, questioning, and reflection rather than the passive reception of information. The high level of teachers' practices observed in this study suggests that classroom environments increasingly support constructivist principles by encouraging students to explore ideas, analyze textual structures, and construct meaning through reflective engagement with texts.

In addition, the results align with the principles of social constructivism, which emphasize the importance

of dialogue and interaction in knowledge construction. Classroom practices such as encouraging students to provide explanations, justify their interpretations, and engage in reflective discussions create opportunities for collaborative learning and shared meaning-making. Through such interactions, students develop not only reading comprehension skills but also the ability to articulate their reasoning and evaluate alternative viewpoints. These practices support the development of reflective thinking and contribute to deeper engagement with textual material.

The particularly strong performance observed in the domain of visual perception skills may reflect the growing emphasis on multimodal literacy in contemporary primary education. Teachers frequently employ visual representations, graphic organizers, and contextual illustrations to help students recognize relationships between textual elements and organize information more effectively. These instructional strategies facilitate the development of deeper comprehension by enabling learners to connect visual cues with linguistic information. Previous studies, such as those conducted by Habók and Magyar (2019) and Zhang and Zhang (2016), have similarly emphasized the significant role of visual scaffolding in supporting students' comprehension and analytical reading abilities.

Similarly, the high level of performance observed in identifying fallacies and drawing conclusions indicates that teachers are increasingly encouraging students to engage in critical reading practices. These practices involve evaluating arguments, identifying inconsistencies, and interpreting implicit meanings within texts. From a metacognitive perspective, such activities enhance learners' awareness of their thinking processes and support the development of reflective learning skills. Prior research by Farrell and Kennedy (2019) and Cirocki and Widodo (2019) has emphasized that integrating reflective thinking strategies into language instruction contributes significantly to the development of analytical reading and independent reasoning among learners.

The findings also revealed strong practices in the domain of providing convincing explanations. This suggests that teachers frequently encourage students to articulate their interpretations and support their ideas with textual evidence. Such practices align with dialogic learning approaches, which emphasize classroom discussion as a means of promoting deeper understanding. Through structured dialogue and explanation, students refine their interpretations, evaluate different perspectives, and strengthen their reasoning skills. Studies such as those conducted by Hanks (2017) and Cirocki et al. (2024) highlight the important role of reflective dialogue in enhancing students' engagement with texts and developing higher-order thinking skills.

Although the domain of proposing solutions recorded slightly lower scores compared with other domains, it still reflected a high level of practice. This domain represents one of the more complex dimensions of reflective thinking, as it requires students not only to analyze information but also to generate creative responses and alternative perspectives. Encouraging students to propose solutions based on their understanding of texts helps connect reading comprehension with problem-solving processes. Similar findings were reported by Cleary et al. (2022), who emphasized that reflective problem-solving activities in reading instruction enhance students' creative and analytical thinking abilities.

Overall, the findings of the first research question highlight the growing importance of reflective thinking in contemporary reading instruction. The high level of observed practices suggests that language teachers are increasingly adopting instructional strategies that promote deep reading learning, where students actively interpret, evaluate, and respond to textual information. Compared with several earlier studies that reported moderate levels of reflective teaching practices, the present findings suggest a more advanced level of implementation. This improvement may reflect recent educational reforms, increased awareness of higher-order thinking skills, and the integration of reflective learning approaches within teacher preparation and professional development programs.

Regarding the second research question, the results indicated that there were no statistically significant differences in teachers' practices according to teaching experience, gender, or academic qualification. Although minor variations were observed in descriptive statistics, these differences were not statistically meaningful. This finding suggests that reflective teaching practices are consistently applied across teachers with different professional and demographic backgrounds.

The absence of significant differences related to teaching experience may be explained by the increasing standardization of pedagogical frameworks and professional development initiatives in education systems.

Teachers at different career stages are often exposed to similar curricular guidelines, instructional resources, and training programs that emphasize reflective and student-centered learning approaches. As a result, both novice and experienced teachers may demonstrate comparable levels of implementation of reflective thinking strategies. This interpretation is consistent with the findings of some previous studies (Al-Barakat & Bataineh, 2011; Al-Barakat & AlAli, 2024b; Al-Barakat et al., 2026b; Alotaibi et al., 2025; Habók & Magyar, 2019; Yan et al., 2020), which reported that structured instructional frameworks can minimize differences in teaching practices associated with experience.

Similarly, the lack of significant differences based on gender suggests that reflective teaching practices are shaped primarily by professional training and instructional expectations rather than by gender-related factors. Teachers, regardless of gender, are typically prepared through similar educational programs and operate within comparable institutional contexts. Previous research in language education, including studies by Bataineh et al. (2026), and Spears et al. (2021), has also reported that gender does not significantly influence teachers' adoption of reflective or student-centered instructional strategies.

The absence of statistically significant differences related to academic qualifications may indicate that practical teaching experience and ongoing professional learning opportunities have a stronger influence on instructional practices than initial academic credentials alone. Teachers frequently develop their pedagogical competencies through classroom experience, collaborative learning communities, and professional development programs. This interpretation aligns with the findings of Baki (2025), Bataineh and Bataineh (2024), and Setiawan et al. (2021), who argued that reflective teaching practices are largely shaped by continuous professional engagement and practical teaching contexts rather than solely by formal academic qualifications.

An important strength of the present study lies in its methodological approach. While many previous studies examining reflective thinking in education have relied primarily on self-reported questionnaires, this study employed a structured classroom observation checklist to examine teachers' practices within authentic classroom environments. Observing actual instructional practices provides more reliable insights into how reflective thinking strategies are implemented in real teaching contexts, thereby enhancing the validity of the findings.

Furthermore, the study contributes to the literature by focusing specifically on reflective thinking within primary reading learning environments. Much of the existing research on reflective thinking has concentrated on teacher education or secondary and higher education contexts. By examining reflective teaching practices in primary language classrooms, the present study expands the empirical understanding of how reflective thinking can be integrated into early reading instruction. The use of clearly defined domains of reflective thinking practices also provides a practical framework that can guide future research and professional development initiatives.

In conclusion, the findings of this study emphasize the crucial role of language teachers in fostering deep reading learning through the integration of reflective thinking strategies. The consistently high level of observed practices suggests that teachers are actively creating learning environments that encourage students to analyze texts, evaluate ideas, justify interpretations, and generate thoughtful responses. At the same time, the absence of significant differences across teacher characteristics indicates that these practices are broadly adopted across the teaching community. These results highlight the potential of reflective teaching strategies to serve as a central component of effective reading instruction, supporting the development of students' critical thinking, analytical reasoning, and lifelong learning skills in primary education.

6. Conclusions and Recommendations

This study examined the practices of language teachers in employing reflective thinking skills within primary reading learning environments to support deep reading learning among primary school students. The findings, based on classroom observations, indicate that teachers demonstrated a high level of performance across the five observed domains: visual perception skills, identifying fallacies, drawing conclusions, providing convincing explanations, and proposing solutions. These results suggest that reading instruction in the observed classrooms extends beyond basic decoding and literal comprehension, emphasizing analytical engagement with texts and encouraging students to interpret, evaluate, and justify ideas.

A key conclusion of the study is that reflective thinking practices appear to be consistently integrated into reading instruction. Teachers frequently guided students to analyze textual information, articulate their

interpretations, and reflect on ideas, which aligns with contemporary educational perspectives that view reading as an active process of constructing meaning. The results also revealed no statistically significant differences in teachers' practices according to teaching experience, gender, or academic qualification. This consistency suggests that reflective teaching strategies are widely shared among teachers and may be influenced by common curricular frameworks and professional expectations guiding reading instruction.

The study contributes to the literature in several ways. First, it provides empirical evidence on the integration of reflective thinking practices within primary reading classrooms, an area that has received relatively limited research attention. Second, the study is methodologically strengthened by its reliance on classroom observation, which allowed for the documentation of teachers' actual instructional practices rather than relying on self-reported data. Third, by focusing on specific domains of reflective thinking within reading instruction, the study offers a practical framework that may support future research and teacher professional development initiatives.

Based on these findings, several recommendations can be proposed. Curriculum developers should continue to integrate reflective thinking activities into reading programs to encourage deeper comprehension and critical engagement with texts. Teacher education and professional development programs should also emphasize practical strategies that support reflective dialogue, textual analysis, and evidence-based reasoning in reading classrooms. In addition, schools should promote learning environments that encourage discussion, interpretation, and collaborative reflection on reading materials.

Despite its contributions, the study has several limitations. The sample was limited to language teachers in schools located in Amman, Jordan, which may restrict the generalizability of the findings to other educational contexts. Furthermore, data were collected exclusively through classroom observation, without the use of rating scales, tests, or interviews that might have provided additional perspectives on teaching practices or learning outcomes. Finally, the observation instrument focused on five domains of reflective thinking practices, visual perception skills, identifying fallacies, drawing conclusions, providing convincing explanations, and proposing solutions, while other dimensions of reflective learning were beyond the scope of this study.

Future research may expand the scope of investigation by including teachers from different regions and educational settings, as well as employing mixed research methods to provide deeper insights into reflective teaching practices and their impact on students' reading development. Overall, the findings highlight the important role of language teachers in fostering deep reading learning through instructional practices that encourage analysis, reflection, and meaningful engagement with texts.

Declarations

AI Statement

This manuscript was prepared by the authors. AI tools (QuillBot and Grammarly) were used in a limited, supervised capacity for language polishing and proofreading only. These tools did not generate ideas, conduct analysis, or shape interpretation. The authors reviewed and verified all content and assume full responsibility for the accuracy, rigor, and conclusions of the research.

Funding

This work was financially supported, for authors affiliated with King Faisal University only, by the Deanship of Scientific Research, Vice Presidency for Graduate Studies and Scientific Research, King Faisal University, Saudi Arabia [Grant No. KFU26133**5**].

Acknowledgement

The authors affiliated with King Faisal University gratefully acknowledge the Deanship of Scientific Research at King Faisal University for providing financial support for this research. The authors from the University of Sharjah and Yarmouk University also extend their sincere appreciation to their respective institutions. The authors further thank all participants who took part in this study for their time and valuable contributions.

Conflicts of Interest:

The authors declare no conflict of interest.

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