



***THE PRACTICES OF COGNITIVE READING STRATEGIES ON
FRESHMAN STUDENTS' READING COMPREHENSION AT ADDIS
ABABA UNIVERSITY***

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Abstract


This study examined freshman students' cognitive reading strategy use and the extent to which such strategies are explicitly taught at Addis Ababa University. A sequential explanatory mixed-methods design was employed with 96 first-year students. Data were collected through the Survey of Reading Strategies (SORS) and classroom observations. Quantitative data were analyzed using descriptive statistics and reliability measures, followed by qualitative triangulation. Results showed moderate overall strategy use ($M = 3.47$), with problem-solving strategies most frequently applied ($M = 3.70$). However, observations revealed limited explicit strategy instruction, indicating a need for structured cognitive strategy training to strengthen academic reading comprehension.

Keywords: Cognitive Strategies, Reading Comprehension, EFL, Freshmen, SORS

INTRODUCTION

English functions as the principal medium of instruction in Ethiopian secondary and tertiary education, making academic literacy a foundational requirement for student success. Since the early modernization of the education system, English has maintained its status as the dominant language of instruction (Heugh et al., 2007). Despite its central role, multiple national and institutional reports consistently document weak English proficiency among secondary and university students (Abiy, 2012; Geberew, 2014). Reading, in particular, remains a critical yet problematic skill area.

Reading comprehension is not a passive decoding process but an active construction of meaning (Grabe, 2009). Effective readers engage in strategic behaviors such as activating prior knowledge, predicting content, monitoring comprehension, and evaluating textual arguments. These processes are strongly grounded in schema theory (Carrell & Eisterhold,

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1983), cognitive theory (Brown, 2001), and transactional theory (Rosenblatt, 1978), all of which emphasize active interaction between reader and text.

Empirical research across EFL contexts demonstrates that explicit instruction in cognitive and metacognitive reading strategies significantly enhances comprehension outcomes (Fan, 2010; Bogale, 2018; Alene, 2021). However, findings are not uniformly consistent. Some studies report limited impact when strategy instruction lacks modeling and guided practice (Adler, 2015; Relton, 2017). This suggests that effectiveness depends not merely on introducing strategies, but on how systematically they are taught.

Within Ethiopia, research on university-level reading strategy use remains limited. Existing studies indicate that students tend to rely heavily on problem-solving strategies such as rereading and guessing word meaning, while underutilizing global and evaluative strategies (Motuma, 2019; Aman & Alemu, 2023). Furthermore, evidence suggests that many instructors prioritize text-based task completion over explicit strategy modeling (Geberew, 2017).

Given the strategic demands of academic reading in higher education, particularly for first-year students transitioning from secondary school, a closer examination of strategy use and instructional practices is warranted. This study therefore addressed the following research questions:

1. To what extent do freshman students at Addis Ababa University use cognitive reading strategies?
2. How are reading strategies implemented in English language classrooms?

RESEARCH METHOD

This study employed a pre-test–post-test quasi-experimental design within a mixed-methods framework. Quasi-experimental designs are particularly appropriate in educational settings where random assignment is impractical but controlled comparison between groups remains feasible (Dörnyei, 2007). The study was grounded in a pragmatic research paradigm, which emphasizes the integration of quantitative and qualitative approaches to obtain a comprehensive understanding of educational phenomena (Kaushik & Walsh, 2019; Maxwell, 2013). In line with a sequential explanatory design, quantitative data were

collected and analyzed first, followed by qualitative classroom observations to triangulate and enrich the findings.

The study was conducted at Addis Ababa University (AAU), one of Ethiopia's public universities. The university was selected through convenience sampling due to accessibility and institutional support. Although the findings cannot be generalized to all Ethiopian universities, AAU reflects characteristics common to many public institutions, including comparable class sizes, instructional resources, and academic contexts. Two intact first-year classes were randomly assigned as control and experimental groups. A total of 96 freshman students participated in the study.

The primary instrument for quantitative data collection was the Survey of Reading Strategies (SORS) developed by Mokhtari and Sheorey (2002). The instrument consists of 25 items categorized into three strategy groups: global strategies, problem-solving strategies, and support strategies. Responses were measured using a five-point Likert scale ranging from "never" to "always." The questionnaire was administered to all participants to measure the frequency of their cognitive reading strategy use.

To complement the survey data, classroom observations were conducted using a structured checklist and detailed field notes. The observation instrument documented instructional practices, types of strategies modeled by instructors, student engagement, and the nature of classroom interaction. This qualitative component enabled the researcher to examine whether reported strategy use aligned with actual instructional practices.

Data collection was conducted after obtaining permission from the freshman program coordinator. A pilot study was first administered to twenty students to ensure clarity and appropriateness of the questionnaire items. Necessary revisions were made based on feedback. The final questionnaire was administered two weeks after student registration in the 2016 E.C. academic year. Subsequently, nine reading sessions taught by three instructors were observed. During each observation, the researcher used the checklist and recorded descriptive notes to capture strategy instruction and classroom dynamics. Quantitative data collection preceded qualitative observation in accordance with the sequential explanatory design.

Quantitative data were analyzed using SPSS Version 26. Descriptive statistics, including means and standard deviations, were computed to determine the level of strategy

use. Reliability analysis was conducted using Cronbach's alpha to measure internal consistency. Test-retest reliability was also calculated to determine the stability of the instrument over time. Qualitative data from classroom observations were analyzed thematically to identify recurring patterns in instructional practices and strategy implementation.

Validity and reliability were carefully addressed. Content validity was established through expert review by experienced EFL instructors who evaluated the clarity, relevance, and representativeness of the questionnaire items. Their feedback resulted in minor modifications to improve precision. Reliability coefficients exceeded the acceptable threshold of 0.70, indicating satisfactory internal consistency (Creswell, 2012). Potential threats to internal validity, including maturation, testing effects, selection bias, and interaction effects, were minimized by selecting comparable intact groups and maintaining consistent instructional conditions.

Ethical considerations were observed throughout the study. Participants were informed about the purpose of the research, and participation was voluntary. Confidentiality and anonymity were guaranteed, and data were used exclusively for academic purposes. The researcher remained aware of potential bias and implemented measures to ensure objectivity during data collection and analysis.

FINDING AND DISCUSSION

Finding

This study investigated students' use of English reading strategies using the 25-item Survey of Reading Strategies (SORS), categorized into global, problem-solving, and support strategies.

Descriptive Statistics of Reading Strategy Use

Table 1 Descriptive Statistics of Global Reading Strategies (N = 96)

No.	Strategy	Mean	SD
1	Find merits and faults in information	2.74	1.088
2	Preview length, structure, subject	3.06	1.103
3	Take overall view before reading	3.15	1.179
4	Use tables/figures/pictures	3.25	1.231
5	Use surrounding clues for unknown words	3.27	1.326
6	Critically analyze information	3.36	1.144

No.	Strategy	Mean	SD
7	Check guesses	3.36	1.224
8	Select information for detailed reading	3.38	0.943
9	Use bold/italic words	3.54	1.178
10	Guess text topic	3.67	1.130
11	Use context clues	3.77	1.110
12	Use prior knowledge	3.78	1.154
Overall Mean		3.36	1.15

Based on Oxford’s (1990) scale, most global strategies were used “sometimes” (2.5–3.4). Only four items (9–12) reached the “usually or often” category, particularly using context clues and prior knowledge. Thus, global strategies were moderately applied but not consistently.

Table 2 Descriptive Statistics of Problem-Solving Strategies (N = 96)

No.	Strategy	Mean	SD
1	Pause and think while reading	3.22	1.078
2	Visualize information	3.57	1.212
3	Read slowly and carefully	3.73	1.174
4	Guess word meanings	3.78	1.038
5	Re-read difficult parts	3.96	1.178
6	Adjust reading speed	3.97	0.989
Overall Mean		3.70	1.11

Problem-solving strategies showed the highest overall mean (M = 3.70), falling into the “usually or often” range. Students frequently re-read difficult parts and adjusted reading speed. This indicates a reactive approach to comprehension difficulties, consistent with schema theory emphasizing prior knowledge in meaning construction.

Table 3 Descriptive Statistics of Support Strategies (N = 96)

No.	Strategy	Mean	SD
1	Read aloud	2.89	1.141
2	Formulate questions	2.96	1.045
3	Paraphrase	3.39	1.173
4	Take notes	3.49	1.273
5	Underline key points	3.59	1.245
6	Review previous paragraphs	3.61	1.019
7	Use reference materials	3.68	1.041
Overall Mean		3.37	1.16

Support strategies were used moderately ($M = 3.37$). While highlighting and using reference materials were frequently applied, reading aloud and questioning were used occasionally.

Table 4 Overall Reading Strategy Categories

Category	Mean	SD	Rank
Problem-Solving	3.70	1.11	1
Support	3.37	1.16	2
Global	3.36	1.15	3
Overall (25 items)	3.47	1.14	—

The overall mean ($M = 3.47$) indicates moderate strategy use. Problem-solving strategies were the most consistently applied. Brown (2001) argues that strategy instruction should be explicitly taught to ensure effective classroom application.

Reliability of the Questionnaire

Table 5 Cronbach's Alpha

Category	Alpha	Items	Interpretation
Global	0.740	12	Acceptable
Problem-Solving	0.705	6	Acceptable
Support	0.721	7	Acceptable
Overall	0.722	25	Acceptable

All coefficients exceeded .70 (Nunnally & Bernstein, 1994), indicating satisfactory internal consistency.

Test–Retest Reliability

Table 6 Test–Retest Reliability ($N = 20$)

Category	Pearson's r
Global	0.857
Problem-Solving	0.887
Support	0.678

Global and problem-solving strategies showed strong stability. Support strategies showed moderate but non-significant stability ($p > .05$), suggesting contextual variability.

Classroom Observation Findings

Classroom observations revealed that teachers frequently reviewed lessons, introduced vocabulary, and monitored comprehension, consistent with interactive reading approaches (Grabe, 2009; Nation, 2013; Li, 2024). However, explicit strategy instruction was limited. Students mainly read texts and answered comprehension questions without modeling of predicting, summarizing, or monitoring strategies (Anderson, 2008; Zhang, 2010; Ueno et al., 2025).

Pre-reading activities were occasionally conducted (Eskey, 2005), but structured instruction in skimming, inferencing, and metacognitive monitoring was minimal (Grabe & Stoller, 2011). Teachers emphasized task completion over strategy development, differing from recommendations by Dorn and Soffos (2005), Block and Pressley (2002), and Paris and Jacobs (1984). Research shows comprehension improves when instruction includes modeling and guided practice (Denton et al., 2015; Sun et al., 2021; Mulatu, 2022; Ueno et al., 2025).

Discussions

The findings indicate that students rely primarily on problem-solving strategies ($M = 3.70$), while global and support strategies remain moderately used. The overall mean ($M = 3.47$) suggests occasional rather than systematic strategy application. Frequent re-reading and speed adjustment reflect a reactive reading approach. Students respond to comprehension breakdowns rather than engage in proactive planning such as previewing or predicting. This pattern suggests limited metacognitive awareness and supports the need for explicit strategy instruction (Pressley & Afflerbach, 1995).

The moderate use and weaker stability of support strategies reinforce this interpretation. Without structured instruction, students apply strategies intuitively rather than strategically. Similar findings were reported by Aman and Alemu, although Oyetunji found earlier strategic awareness among some students. Differences in motivation and prior learning experiences likely explain these variations.

Classroom observations confirm the quantitative results. While teachers provided supportive scaffolding consistent with Vygotskian principles, strategy modeling and guided practice were limited. Pre-reading and metacognitive activities were insufficiently emphasized, reducing opportunities for schema activation (Carrell & Eisterhold, 1983; Bernhardt, 2011). Overall, both quantitative and qualitative findings indicate that students

possess moderate strategic awareness but lack systematic training. Instruction focused more on answering comprehension questions than on developing transferable reading strategies. Effective improvement requires explicit teaching of global, problem-solving, and support strategies, structured practice, and professional development emphasizing metacognitive instruction.

CONCLUSION

This study confirms that students use English reading strategies at a moderate level, with problem-solving strategies being the most frequently applied, followed by support and global strategies. The overall mean score ($M = 3.47$) indicates that strategy use is occasional rather than systematic. Students tend to rely on reactive approaches, such as re-reading and adjusting reading speed, rather than proactive strategies involving planning, predicting, and structured monitoring.

The reliability findings strengthen this conclusion. Global and problem-solving strategies demonstrated acceptable internal consistency and strong test–retest stability, suggesting that these strategies represent relatively consistent reading behaviors. In contrast, support strategies showed weaker and non-significant stability, indicating inconsistency in their application and possible contextual influences. These quantitative results were supported by classroom observations, which revealed that although teachers reviewed lessons, introduced vocabulary, and monitored comprehension, explicit modeling and guided practice of reading strategies were limited. Instruction largely emphasized task completion rather than systematic development of metacognitive and transferable reading skills. This confirms a gap between recommended strategy-based instruction and actual classroom practices.

These findings imply the need for more explicit and structured strategy instruction in English reading classrooms. Teachers should consistently model strategies such as predicting, summarizing, inferencing, and monitoring comprehension, while integrating pre-reading, while-reading, and post-reading activities that activate prior knowledge and encourage independent strategy use. The incorporation of authentic and culturally relevant materials may further enhance engagement and comprehension.

From a curriculum perspective, reading materials should include tasks that explicitly promote strategic thinking across various text types. Given the inconsistency in support strategy use, activities involving note-taking, paraphrasing, and the use of reference materials should be strengthened. Teacher professional development is also essential. Training programs should emphasize strategy modeling, guided practice, collaborative learning, and gradual release of responsibility to align instructional practice with evidence-based comprehension instruction.

Assessment practices should be diversified to obtain a more accurate picture of students' strategic behavior. Combining self-report questionnaires with observational techniques, think-aloud protocols, and performance-based assessments would enhance validity. Continuous formative assessment can help monitor students' metacognitive growth and inform instructional adjustments.

Several limitations should be acknowledged. The study involved only one group of first-year students from a single institution, limiting generalizability. The reliance on self-reported data may have introduced response bias, and the presence of observers may have influenced classroom behavior. Additionally, the limited number of observation sessions may not fully capture instructional variation. Future research should involve larger and more diverse samples, incorporate qualitative and longitudinal designs, and further explore how sustained explicit instruction influences the development of strategic reading over time.

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