Marking Meaning: EFL students' Annotation as a Tool for Academic Literacy

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Abstract

In the context of Indonesia higher education, English academic reading poses notable challenges for EFL students, particularly due to complex language and limited instructional support. To address this issue, annotation emerges as a critical strategy to facilitate comprehension and engagement with scholarly texts. This study aims to explore the annotation practices employed by eight-semester EFL students when reading academic materials. Using a descriptive qualitative method, data were collected through documentation of annotated texts and semi-structured interviews involving six students from an English Language Education Study Program at Pakuan University. The analysis followed Marshall's framework, categorizing annotations into three types: anchor only, content only, and compound. Findings revealed that students predominantly used anchor only annotations- highlighting and underlining- to mark essential information. Some employed compound annotations by integrating text markers with reflective notes, while content only annotations were less frequent but demonstrated deeper processing through independent summaries. These practices indicate that annotation supports not only reading comprehension but also academic writing and critical engagement. The study recommends integrating explicit instruction on annotation techniques into EFL reading curricula to empower students as active readers and knowledge constructors.

Keywords: a*cademic literacy;annotation strategy; reading comprehension*

INTRODUCTION

In the era of globalization, the dominance of English as the lingua franca of academia has grown increasingly undeniable. The ability to read and comprehend texts written in English is no longer considered a supplementary skill; rather, it has become an essential academic competency for students across the globe. This linguistic shift holds particular significance in Indonesia, where English is categorized as a foreign language but plays a pivotal role in higher education. Indonesian university students are routinely expected to navigate a variety of scholarly sources—ranging from peer-reviewed journal articles and empirical research reports to theoretical essays and academic books.

These English-language texts are not mere optional readings; they form the backbone of academic endeavors such as coursework analysis, thesis development, literature reviews, and research activities. As a result, mastering English goes beyond conversational fluency. It involves the ability to engage critically with complex information, interpret technical vocabulary, and synthesize ideas across disciplines. In

this setting, English proficiency is not only beneficial—it is fundamental to achieving academic success and scholarly literacy(Dardjito et al., 2023).

To set a consistent standard for language proficiency across contexts, the Common European Framework of Reference for Languages (CEFR) provides clear benchmarks that outline what learners should be able to do at various levels. Within academic settings, particularly when students are expected to engage with complex scholarly texts, the CEFR designates the B2 level as a critical threshold. This level signifies not just a command of the English language in terms of vocabulary and grammar, but also an ability to perform advanced cognitive tasks related to reading. These include identifying and analyzing arguments, discerning the structure and purpose of rhetorical devices, and recognizing abstract conceptual relationships that underpin academic discourse (Darwin et al., 2024).

For Indonesian university students, achieving this level of proficiency presents considerable challenges. Numerous studies have revealed that many struggle to meet the demands of academic reading in English—a skill that is indispensable for understanding journal articles, research findings, and theoretical literature commonly used in higher education. This difficulty is multifaceted: one of the most prominent issues is the limited pedagogical support provided by institutions, which often lack structured programs aimed at building academic reading skills. Furthermore, students frequently have insufficient exposure to authentic academic English materials prior to entering university, leaving them unfamiliar with the formal tone, technical vocabulary, and disciplinary conventions embedded in such texts. Compounding these issues is the complex nature of the texts themselves—often characterized by dense syntax, abstract ideas, and discipline-specific terminology—which poses a significant cognitive and linguistic load for learners who are still developing their English proficiency (Anwar &Sailuddin, 2022).

Faced with the multifaceted difficulties of comprehending English-language academic texts—ranging from limited vocabulary and unfamiliar disciplinary jargon to abstract conceptual structures —Indonesian university students have increasingly adopted adaptive strategies to navigate their reading tasks more effectively. The urgency of researching these strategies lies in understanding how students actively engage with and make meaning from complex material, a skill that is crucial for academic success. One of the most prominent and practical methods employed is annotation, a variable central to this study. Far from being a passive or superficial tactic, annotation is recognized as an active reading strategy that allows students to engage with text in a purposeful and reflective manner. It transforms reading from a linear, often overwhelming process into an interactive exercise, encouraging learners to pause, question, and respond as they move through dense material (Damayanti, 2020; Roy et al., 2021).

Annotation encompasses a variety of techniques including highlighting key phrases, underlining significant concepts, making marginal notes, and inserting personal comments or questions directly into the text. Through these actions, students construct a dialogue with the reading material, enabling them to monitor their understanding and resolve confusion in real time. This process not only supports the identification of essential information but also fosters analytical thinking and intellectual engagement. Research has shown that annotation improves comprehension by helping students organize their thoughts, draw connections between ideas, and reflect critically on what they are reading, thereby deepening their understanding and promoting meaningful learning outcomes (Lloyd et al., 2022).

In academic contexts—especially where English is a foreign language—annotation functions as a bridge between surface-level reading and deeper cognitive processing. It gives students the tools to slow down and dissect complex ideas, rather than passively skimming or relying solely on translation. Ultimately, annotation empowers students to take ownership of their learning, refine their reading skills, and participate more actively in academic discourse.

Interestingly, (Wolfe, 2000) categorizes annotations into three types: anchor-only annotations that mark key phrases or sections, content-only annotations that offer interpretations or thoughts, and compound annotations which combine both functions. Each type offers different cognitive benefits and serves unique reading purposes, depending on the student's objective and proficiency level. Yet despite its benefits, effective annotation is not universally practiced or understood. Zhang, (2024) found that while many EFL (English as a Foreign Language) students in Indonesia rely on methods like highlighting and margin notes, they frequently encounter difficulties distinguishing main ideas, paraphrasing complex information, or integrating their notes into broader analyses. These challenges underscore the need for targeted instruction and research into annotation practices—especially in EFL contexts where both language and academic literacy present layered challenges. While previous research has identified a general reliance on highlighting and margin notes by Indonesian EFL students and the difficulties they face in using these notes for deeper analysis, a specific gap exists in understanding the types of annotation practices students employ and the cognitive functions these serve. This article seeks to fill this gap by investigating how Indonesian university students approach annotation when reading academic texts in English. By analyzing their habits, challenges, and strategic variations, the study aims to contribute to more effective pedagogical interventions that support students' academic reading proficiency and overall English-language development.

METHOD

This study employed a descriptive qualitative research design, which is particularly suited for exploring complex social phenomena through rich, non-numerical data. Descriptive qualitative research aims to provide an in-depth portrayal of the subject matter by collecting and interpreting data in a way that highlights patterns, meanings, and contextual nuances without the use of statistical analysis (Elliott &Timulak, 2021). Unlike experimental or correlational approaches, this method does not seek to manipulate variables or establish causality. Instead, it strives to accurately represent and describe real-world experiences, behaviors, and perceptions as they naturally occur. In this study, the researchers described the annotation practices of eight-semester EFL students when they read academic materials. The data collected to describe these practices consisted of documentation of annotated text and transcripts from semi-structured interviews with six students from English Language Education Study Program at Pakuan University. The analysis followed Marshall's framework, categorizing the annotations into three types: anchor only, content only, and compound.

According to (Nassaji, 2015), qualitative research offers a comprehensive framework for understanding human experiences by drawing on data gathered from diverse sources. These sources often include interviews, observations, documents, and other artifacts that reveal the participants' personal perspectives, attitudes, and lived experiences. By focusing on interpretive and exploratory insights, qualitative research

enables scholars to uncover the layers of meaning behind participants' responses and social dynamics.

Kim et al., (2017) further clarifies that descriptive research, a subset within qualitative inquiry, is designed to deliver clear and objective information regarding social conditions or behavioral contexts. It emphasizes presenting findings in a straightforward, unaltered form—free from experimental manipulation or statistical processing. In this study, the researchers utilized two primary instruments to gather data: documentation and interviews. Documentation involved analyzing relevant written materials or records, while interviews provided direct access to participants' viewpoints through structured or semi-structured conversations. Together, these methods helped construct a holistic understanding of the research focus, grounded in authentic experiences and descriptive analysis.This study employed a descriptive qualitative research design to explore the annotation practices of six eighth-semester EFL students from the English Language Education Study Program at a private university in Bogor. Participants were selected using convenience sampling. Data were collected using two primary instruments: documentation of their annotated texts, which provided visual evidence for classification, and semi-structured interviews, which were used to understand the students' purpose, process, and perceived benefits of annotation. The data analysis followed the Miles and Huberman models, involving three stages: data condensation, where relevant information was selected and coded; data display, where findings were presented in a descriptive form; and conclusion drawing and verification, where patterns were interpreted and confirmed through triangulation of both documentation and interview data. This comprehensive approach ensured a holistic understanding of the participants' experiences and behaviors.

RESULTS AND DISCUSSION

The analysis for this study centered on a single, explicit research question: "What annotating practices do students employ on academic text?". To answer this question, researchers gathered data from six eighth-semester students in the English Language Education Study Program at a private university in Bogor. The analysis relied on two main instruments: documentation of students' annotated academic texts and semi-structured interviews. This dual approach allowed the researchers to thoroughly investigate the students' annotation habits and practices, providing a comprehensive answer to the study's one and only research question.

The findings of this study align with and expand upon previous research on annotation practices. The prevalence of Anchor Only annotations, particularly highlighting and underlining, confirms what other studies have found. For example, a study by Mardiah et al. (2023) on EFL students in Jambi Province found that highlighting and writing margin notes were common strategies, with highlighting accounting for 29% of the annotations observed. Similarly, the use of color-coding for different purposes, as seen with participants in this study , supports the concept of finer-grained functionalities where annotations serve as procedural aids for organizing and navigating information. This demonstrates that students use these visual cues for practical purposes like information retrieval and distinguishing key parts of the text. However, this study also highlights a gap between common practice and deeper, more critical engagement. The limited use of Content Only annotations and the observation that some participants' notes were not tied to deeper reflection echo the challenges identified by Zhang (2024), who found that Indonesian EFL students often struggle to

integrate their notes into broader analysis or distinguish main ideas. This suggests that while students are marking up texts, they may not always be engaging in the higher-order cognitive functions that annotations can facilitate. Conversely, the use of Compound Annotation by some participants in this study, which combines highlighting with explanatory notes and questions, shows evidence of these higher-order functions. This practice goes beyond simple marking and reflects deeper cognitive engagement, such as analyzing, connecting concepts, and constructing new understanding through personal reflection. The findings indicate that these annotations support critical thinking and academic writing by allowing students to clarify complex ideas in their own words, a benefit noted by Lloyd et al. (2022). The use of Compound annotations also aligns with the findings of Marshall et al. (2004), who observed that "Anchor + content" annotations were the most frequently shared type among graduate students, indicating a more refined and purposeful use of annotation for academic communication.
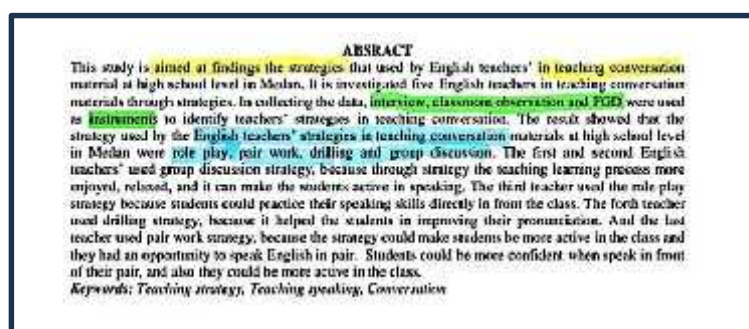
1. Anchor Only

Figure 1

Anchor Only Annotation Practice by Participant 3

Participant 3, who was working on a paper titled "*Teachers' Strategies in Teaching English Conversation,*" demonstrated a strategic and organized approach in her annotation practices. Based on Figures 1, she applied Anchor Only annotations by using a consistent color- coding system to distinguish various components of academic texts. For instance, yellow was used to highlight research objectives, green for methodology, blue for findings, purple for theoretical explanations on teacher strategies, and red for theories related to teaching conversation. This technique helped her visually organize information and quickly identify the most relevant parts when writing the theoretical framework of her paper. Such a method corresponds to what Bélanger (2010)identifies as finer-grained functionalities, particularly in the context of classifying and retrieving information efficiently.
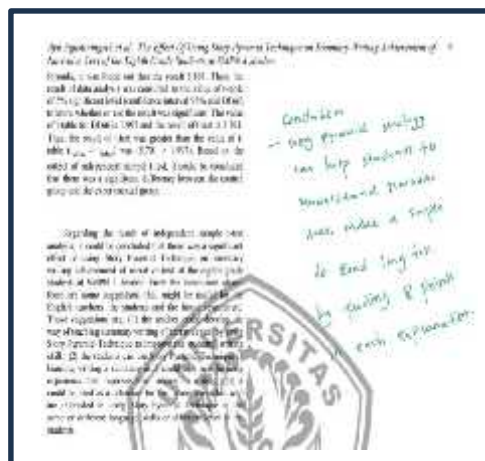
2. Content only

Figure 2
Content Only Annotation Practice by Participant 4

Participant 4 showed the use of Content Only annotation in her academic reading practices, as illustrated in Figure 2. Unlike Anchor Only annotations that rely on visual markers such as highlighting or underlining, Content Only annotations involve writing independent notes or summaries that are not directly anchored to a specific section of the text. In this case, Participant 4 wrote a concise summary of the research findings from the journal she was reading. This summary served as a personal reflection and a way to internalize the main points of the article without having to re-read the entire passage. Her note functioned as a cognitive tool to retain essential information and to support later use during the writing process.

The practice of summarizing without highlighting specific text indicates a more reflective and content-focused reading strategy. It aligns with higher-order annotation functions, particularly those related to epistemic and interpretative purposes (Nantke&Schlupkothen, 2020). By reconstructing meaning in her own words, Participant 4 demonstrated an active effort to comprehend and personalize the material. This behavior also supports what Bélanger(2010) describes as annotation for understanding and reorganization, emphasizing mental processing over simple text marking. Although this annotation type appeared less frequently among participants, its use by Participant 4 underscores its value in fostering deep comprehension and aiding memory retention in academic reading.
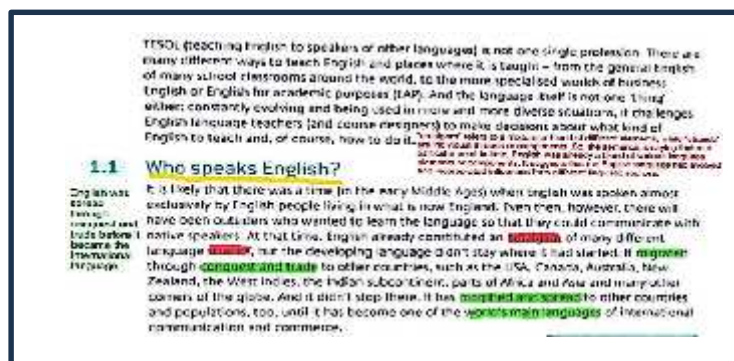
3. Compound

Figure 3
Anchor & Content Annotation Practice by Participant 3

Participant 3 demonstrated the use of Compound Annotation, specifically the combination of visual markers and written commentary, as seen in Figures 3. In these figures, she employed underlining and highlighting to emphasize key points within a textbook, particularly related to speaking skills in English language teaching. Alongside these markers, she wrote explanatory notes, translated unfamiliar vocabulary, and posed reflective questions in the margins. For example, she highlighted unknown words in red and wrote their definitions directly above the text, while also underlining section titles in yellow to indicate core discussion points. Furthermore, she included margin notes in green to summarize or comment on the content, as well as questions that reflected her need for deeper clarification or analysis.

This annotation practice shows an active engagement with the text, where the participant not only identified important information but also interpreted, translated, and connected it to her personal understanding. Such behavior aligns with higher-order annotation functions, as defined by Bélanger, particularly in terms of constructing meaning, clarifying concepts, and supporting critical thinking. Additionally, the integration of anchor and content reflects both the epistemic and interpretative functions of annotation, emphasizing her cognitive involvement in the reading process. This dual approach indicates that Participant 3 used annotation not only as a tool for comprehension but also as a strategy for knowledge construction and reflection, which is essential for academic literacy and scholarly writing.

CONCLUSION

This research aimed to explore and analyze the annotation practices employed by eighth-semester EFL students in comprehending academic texts. Based on documentation and interviews conducted with six eighth- semester students from the English Education Study Program at a private university in Bogor, it was found that participants used various types of annotations, which were classified into three categories according to Marshall (2004): Anchor Only, Content Only, and Compound

Annotation (Anchor and Content). Among these three types, Anchor Only emerged as the most commonly used annotation type, as it was perceived to be more practical and efficient for marking important parts of the text such as theoretical quotations, definitions, and research findings. However, one participant also employed Content Only annotations by writing summaries or important information to process and reconstruct the content of their readings. Additionally, two participants demonstrated the use of Compound Annotation, which involves combining visual markers such as highlighting or underlining with explanatory notes or comments added beside the text.

This indicates a deeper and more active engagement in the academic reading process. From the annotation practices observed, it is evident that the function of annotation goes beyond simple text marking. Annotations also serve to store key information, enhance comprehension, streamline the literature processing, and even support academic writing tasks such as paper development. These functions align with what Bélanger defines as finer-grained functionalities, including technical functions such as navigation, idea storage, and information classification. Moreover, based on the data, two participants demonstrated annotation practices that fall into the category of higher-order functions, in which annotations were used for analyzing, connecting concepts, and constructing new understanding through personal reflection. In general, it can be concluded that annotation is a crucial and beneficial reading strategy for EFL students in managing academic texts. Annotation not only aids in deep comprehension of the material but also functions as a cognitive tool for planning, writing, and constructing academic arguments. Therefore, mastering effective annotation techniques can greatly assist students in addressing the challenges of academic literacy, particularly in the context of scholarly writing.

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