

A Comparative Analysis of Error Correction Techniques in Second Language Acquisition: Efficacy and Pedagogical Implications

Riley Edwards

Associate Professor

Humboldt University of Berlin

Unter den Linden 6, 10099 Berlin, Germany

Avery Jones

PhD

Lund University

Box 117, 221 00 Lund, Sweden

Chris Taylor

Professor

University of Amsterdam

Spui 21, 1012 WX Amsterdam, Netherlands

Abstract. The present study investigates the efficacy of various error correction techniques in second language acquisition (SLA), focusing on the impact of explicit versus implicit corrective feedback. Employing a mixed-methods approach, we conducted a quasi-experimental study with 120 participants enrolled in language courses across three European universities. Quantitative data was gathered through pre- and post-tests measuring grammatical accuracy, while qualitative insights were obtained through participant interviews and classroom observations. Findings reveal that explicit feedback significantly enhances grammatical accuracy, with an average improvement of 25% compared to implicit feedback. Moreover, qualitative data indicates that learners benefit from a deeper understanding of language rules when exposed to explicit correction techniques. This study contributes to the existing literature by providing robust evidence of the pedagogical implications of different error correction strategies in SLA contexts, suggesting that educators adopt a more systematic approach to feedback mechanisms in language teaching.

Keywords: Second Language Acquisition, Error Correction Techniques, Explicit Feedback, Implicit Feedback, Grammatical Accuracy, Pedagogical Implications, Language Education, Qualitative Analysis, Quantitative Research

Introduction

Second language acquisition (SLA) continues to be a pivotal focus within linguistics and educational research, particularly as globalization increases the demand for bilingualism. The ability to communicate effectively in a second language not only influences individual career opportunities but also impacts a nation's economic growth by enhancing workforce competencies across various sectors. Despite progress in SLA methodologies, a notable gap persists in the understanding of effective error correction techniques, particularly regarding

their applicability in diverse educational settings. Previous studies have predominantly concentrated on broad pedagogical strategies while neglecting the nuanced effects of specific feedback types on learner outcomes. For instance, researchers have explored the dichotomy between explicit feedback, which involves direct correction of errors, and implicit feedback, characterized by more subtle cues. However, these studies often lack rigorous empirical frameworks, resulting in inconclusive findings that fail to offer actionable insights for educators. This investigation aims to address this gap by evaluating the efficacy of various error correction techniques through a structured empirical approach. Specifically, it poses the following research questions: What is the comparative effectiveness of explicit versus implicit feedback in improving grammatical accuracy? How do these techniques impact learner engagement and understanding of language rules? To structure this paper, we begin with a comprehensive overview of existing literature on SLA feedback mechanisms, followed by our methodology, an analysis of results, and concluding with implications for language teaching practices.

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Methodology

To investigate the impact of error correction techniques on second language acquisition, we utilized a mixed-methods research design integrating both quantitative and qualitative approaches. The study was conducted across three European universities with a total of 120 students enrolled in intermediate language courses. Participants were grouped into two distinct cohorts: one receiving explicit corrective feedback and the other receiving implicit feedback. Data collection involved a pre-test and post-test protocol, utilizing a custom-designed grammar assessment administered through the Blackboard Learning System (version 9.1). Statistical analysis was performed using SPSS (version 27.0) to evaluate significant differences in grammatical accuracy between groups, utilizing paired t-tests ($p < 0.05$) for inferential validation. Additionally, qualitative data from participant interviews were recorded using Zoom (version 5.4.3) and transcribed for thematic analysis, leveraging MaxQDA (version 2020) for coding and categorizing responses. The experimental procedures comprised eight instructional sessions, each lasting 90 minutes, where error correction techniques were systematically integrated into the learning activities. Explicit feedback involved direct correction of written exercises, while implicit feedback entailed providing clues and prompting self-correction. This comprehensive methodological framework ensures a robust analysis of the effects of feedback types on SLA outcomes.

Results and Discussion

The findings of this comparative analysis revealed significant differences in the grammatical accuracy of participants exposed to explicit versus implicit feedback. Statistical results indicated that the explicit feedback group achieved an average post-test

score of 85%, compared to 60% in the implicit group, yielding a statistically significant p-value of 0.001. Furthermore, qualitative feedback from interviews highlighted that participants receiving explicit correction felt more confident in their understanding of grammatical structures, attributing this to the clarity offered by direct feedback. Participants noted a perceived increase in engagement with language exercises when corrections were made clear. In contrast, those in the implicit group reported confusion and a lack of depth in learning. These results suggest that explicit feedback not only enhances immediate performance metrics but also fosters a more profound learner comprehension of language rules, advocating for its integration into language teaching methodologies. The implications of these findings are substantial, prompting educators to reconsider feedback strategies to optimize SLA effectiveness. The study aligns with critical pedagogical frameworks that emphasize the necessity for clear instructional techniques in language education, ultimately contributing to improved learner outcomes.

Conclusions

This research underscores the significant impact of feedback types on second language acquisition, asserting that explicit corrective feedback markedly enhances grammatical accuracy and learner engagement. The findings advocate for a shift in pedagogical practices, encouraging educators to employ explicit correction strategies to facilitate deeper understanding and retention of language rules. Future research should explore longitudinal impacts of these feedback techniques and their applicability across various language contexts. This study contributes vital insights that may refine instructional methodologies and enhance SLA practices in contemporary educational settings.

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Conflict of Interest

The authors declare no conflict of interest.

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