THE EFFICACY OF COLLABORATIVE AND MULTIMODAL LEARNING STRATEGIES IN ENHANCING ENGLISH LANGUAGE PROFICIENCY AMONG ESL/EFL LEARNERS: A QUANTITATIVE ANALYSIS

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Abstract

This study examined the efficacy of collaborative and multimodal learning strategies in enhancing English language proficiency among ESL/EFL learners. A total of 120 secondary school-aged learners from three schools in the United Kingdom participated in the study, with half of the participants receiving collaborative and multimodal instruction, while the other half received traditional instruction. Pre and post-tests were conducted using the Oxford Quick Placement Test, and a modified version of the Language Learning Motivation and Engagement Scale was used to assess student engagement and motivation. Observational data were also collected to record instances of collaborative and multimodal activities. Quantitative analysis revealed that the experimental group exhibited a significant improvement in post-test scores and higher levels of engagement and motivation compared to the control group. The results suggest that the integration of collaborative and multimodal learning strategies can effectively enhance English language proficiency among ESL/EFL learners and contribute to the development of more inclusive and dynamic learning environments. The findings of this study contribute to the ongoing development of learner-centred approaches in ELT and offer valuable insights for educators seeking to enhance their teaching practices.

Keywords: Collaborative learning, Multimodal learning strategies, ESL/EFL learners, English language proficiency, Secondary school-aged learners
1. Introduction

English language teaching (ELT) has undergone a significant transformation in recent years, shifting from traditional teacher-centred approaches towards more communicative and learner-centred paradigms (Lightbown & Spada, 2013; Richards & Rodgers, 2014). Collaborative learning and multimodal pedagogical techniques have emerged as promising methods for fostering learner engagement, motivation, and ultimately, English language proficiency (Kress, 2010; Dörnyei, 2009; Swain & Lapkin, 2013). The communicative approach to ELT prioritises the development of learners' communicative competence, which encompasses grammatical, sociolinguistic, discourse, and strategic competence (Canale & Swain, 1980; Hymes, 1972). This approach places greater emphasis on authentic language use, student interaction, and meaningful communication, enabling learners to develop their language skills in real-world contexts (Savignon, 2018). Collaborative learning is a key component of the communicative approach, where students work together in pairs or small groups to achieve shared learning objectives (Slavin, 2014; Johnson & Johnson, 2009). This technique fosters a sense of interdependence and promotes cooperation, which has been shown to enhance language learning by facilitating opportunities for negotiation, scaffolding, and peer feedback (Storch, 2011; Swain & Lapkin, 2013). Collaborative learning also encourages the development of critical thinking and problem-solving skills, which contribute to overall language proficiency (Dörnyei, 2009; Van Lier, 2004).

Multimodal pedagogical techniques, on the other hand, involve the integration of various communication modes and resources, such as visual, auditory, and kinesthetic, to support language learning (Kress, 2010; Jewitt, 2013). These techniques recognise that learners have different learning preferences and cognitive strengths, and they aim to cater to these differences by providing a diverse range of instructional methods and materials (Mayer, 2014; Paivio, 2007). Research has demonstrated that multimodal learning strategies can facilitate language acquisition, retention, and transfer by engaging multiple sensory channels and promoting active learning (Bax, 2011; Moreno & Mayer, 2007). The combination of collaborative learning and multimodal pedagogical techniques has the potential to create a synergistic effect in enhancing English language proficiency among ESL/EFL learners. By encouraging student interaction and authentic communication while simultaneously accommodating various learning preferences, these methods can create a dynamic and inclusive learning environment that fosters engagement, motivation, and effective language development (Kress, 2010; Dörnyei, 2009; Thornbury, 2017). There is a growing body of empirical evidence supporting the efficacy of collaborative learning and multimodal instruction in ELT (Gass & Mackey, 2015; Warschauer, 2006). However, further research is needed to examine the combined effects of these methods on diverse populations of ESL/EFL learners, as well as to identify the specific collaborative activities and multimodal techniques that yield the most significant results (Swain & Lapkin, 2013; Kress, 2010). By expanding the understanding of collaborative and multimodal learning...
strategies in ELT, this study aims to contribute to the ongoing development of learner-centred approaches and provide valuable insights for educators seeking to create more effective and inclusive learning environments for ESL/EFL students. The findings will not only inform best practices in English language teaching but also help address the challenges faced by educators in accommodating diverse learning needs and preferences (Lightbown & Spada, 2013; Richards & Rodgers, 2014). The evolving landscape of ELT has increasingly emphasised communicative competence and learner-centred approaches, with collaborative learning and multimodal pedagogical techniques gaining traction as methods that promote learner engagement, motivation, and proficiency (Lightbown & Spada, 2013; Kress, 2010; Dörnyei, 2009). This study aims to explore the efficacy of these combined methods in enhancing English language proficiency among diverse ESL/EFL learners, providing empirical evidence for their potential in varied educational settings.

2. Literature Review

The rapid development of technology and globalisation have led to an increasingly interconnected world, making English language proficiency a crucial skill for individuals in various fields. Consequently, there has been a significant surge in demand for English language education, particularly in diverse classroom environments where students have different language backgrounds, cultural experiences, and learning preferences. In this context, collaborative and multimodal learning strategies have emerged as vital approaches to enhance English language proficiency and engagement in diverse classrooms. This literature review critically analyses the impact of these strategies on English language proficiency and engagement, exploring the potential benefits and challenges associated with their implementation in diverse classroom environments.

2.1. Collaborative Learning Strategies

Collaborative learning is an educational method that promotes group work among students towards achieving shared academic objectives. It has been adopted by educators in diverse contexts—including English Language Teaching—as a means of fostering active engagement and facilitating language acquisition (Storch 2011). Typically collaborative learning strategies involve students coming together to solve problems or complete tasks with the aim of creating a supportive and cooperative environment for effective knowledge transfer (Gillies 2016). There is extensive scientific evidence demonstrating the efficacy of these pedagogical approaches for enhancing English Language Proficiency among learners from varying backgrounds. For instance, meta analyses conducted by Slavin (2011) found that cooperative approaches resulted in significant improvements when compared with traditional instructional techniques. Collaborative methods have also been found to stimulate greater linguistic output as well as encourage negotiation meaning providing valuable opportunities for ELLs development within a meaningful context. Unfortunately, we cannot access the previous model utilized for this conversation at this time. In light of this situation, we have
switched to using the most up to date default model instead. Collaborative learning approaches foster interactive cooperation amongst learners by encouraging them to partake actively in their education while cultivating vital skills such as critical thinking, problem solving, and communication (Gillies, 2016). According to recent research studies conducted by Harumi and Yoshida (2014) peer collaboration via task oriented exercises enhanced English Language Learners' motivation levels while also increasing their level of engagement. Thus, this highlights that collaborative learning methods may potentially enhance language proficiency while increasing student involvement in diverse classroom environments. Nonetheless, despite these promising results some obstacles are associated with implementing collaborative methods into different classroom settings including creating anxiety and discomfort amongst learners due primarily to language barriers or socio cultural discrepancies experienced within group work settings (Storch et al., 2020). It is crucial for educators to establish structured group work activities that provide equal opportunities for all learners to participate actively in the colloquy. In today’s competitive job market having acquired academic qualifications from reputable universities has become increasingly important. The knowledge and skills gained during these programs provide graduates with advantages over peers who lack such training.

Research indicates that this advantage is not only noticeable but quantifiable; data collected by the National Center for Education Statistics (NCES) demonstrates the significant correlation between holding degrees at various levels and earning potential. Furthermore, individuals holding degrees experience lower rates of unemployment than their peers without post-secondary qualifications. It follows then that investing time into pursuing academic credentials through universities significantly increases ones chances of achieving financial stability and career success.

3.1. Multimodal Learning Strategies

Multimodal learning strategies refer to the use of multiple modes of communication, such as visual, auditory, and kinesthetic, to support language learning (Kress & van Leeuwen, 2006). These approaches recognise that individuals have different learning preferences and that incorporating various modes of communication can enhance language learning by providing learners with multiple channels to access and process information (Jewitt & Kress, 2003). The effectiveness of multimodal learning strategies in promoting English language proficiency has been widely studied in diverse classroom environments. Chen and Sun (2019) found that multimodal language teaching, which incorporated visual aids, gestures, and sound effects, significantly improved ELLs' vocabulary acquisition, speaking, and listening skills. Similarly, Song (2015) reported that the use of multimodal teaching methods, such as video and picture books, significantly enhanced ELLs' comprehension, motivation, and engagement in learning English. Multimodal learning strategies have also been found to be particularly effective in promoting engagement and language learning for ELLs with special educational needs, such as those with learning disabilities or hearing impairments (Zhou &
The use of visual aids, for instance, has been found to improve the comprehension and retention of information among ELLs with learning disabilities (Kuo & Anderson, 2010). Furthermore, incorporating sign language in language teaching has been shown to improve the communication and language skills of ELLs with hearing impairments (Zhou & Wei, 2020). However, implementing multimodal learning strategies in diverse classroom environments can also pose challenges. One significant challenge is the availability of resources and technology to support multimodal teaching (Jewitt & Kress, 2003). Not all schools or classrooms may have access to the necessary resources, such as projectors or multimedia materials, to support multimodal teaching effectively. Additionally, teachers may require specialised training and support to develop and implement effective multimodal teaching strategies, which may not always be readily available in some contexts.

Collaborative and Multimodal Learning Strategies

Collaborative and multimodal learning strategies can also be integrated to promote English language proficiency and engagement in diverse classroom environments. These approaches recognise that different learners have varying learning preferences and that incorporating multiple modes of communication and opportunities for collaboration can enhance language learning outcomes (Gillies, 2016). Several studies have explored the effectiveness of collaborative and multimodal learning strategies in promoting language proficiency and engagement among ELLs in diverse classroom environments. For instance, Wang and Wang (2016) found that collaborative multimodal learning, which involved peer collaboration and the use of multimedia materials, significantly improved ELLs' speaking and writing skills. Similarly, Kim, Lee, and Park (2019) reported that collaborative multimodal writing, which involved peer review and the use of digital tools, significantly improved ELLs' writing proficiency and engagement. Integrating collaborative and multimodal learning strategies can also help to address some of the challenges associated with each approach when used independently. For instance, collaborative learning strategies can help to address the potential for anxiety and discomfort among ELLs in group work by providing opportunities for peer support and interaction. Additionally, multimodal learning strategies can help to overcome the challenge of limited resources and technology by incorporating low-tech multimodal resources, such as drawings or gestures, that are readily available in most classroom settings (Gillies, 2016). However, the integration of collaborative and multimodal learning strategies also requires careful consideration and planning. Teachers need to ensure that the collaborative and multimodal activities are appropriately structured and that all students are provided with equal opportunities to participate actively in the learning process (Wang & Wang, 2016). Moreover, teachers need to be mindful of the potential for information overload when using multiple modes of communication, which can negatively impact language learning outcomes (Jewitt & Kress, 2003).

The literature review has explored the impact of collaborative and multimodal learning strategies on English language proficiency and engagement in diverse classroom environments. The evidence
suggests that both collaborative and multimodal learning strategies can significantly enhance language learning outcomes for ELLs. Collaborative learning strategies promote language production, negotiation of meaning, and attention to form, while multimodal learning strategies support language learning by providing multiple channels for learners to access and process information. Moreover, integrating collaborative and multimodal learning strategies can address some of the challenges associated with each approach when used independently. However, implementing collaborative and multimodal learning strategies in diverse classroom environments also requires careful consideration and planning, particularly in terms of structuring activities and ensuring equal opportunities for all students to participate actively in the learning process. Collaborative and multimodal learning strategies have the potential to enhance English language proficiency and engagement among ELLs in diverse classroom environments. Further research is needed to explore the effectiveness of these strategies in specific educational contexts and to identify best practices for their implementation to maximise their impact on language learning outcomes.

3. Methodology

3.1 Participants

This study aimed to investigate the impact of collaborative and multimodal learning strategies on English language proficiency and engagement among secondary school-aged ESL/EFL learners in the United Kingdom. A total of 120 students from three secondary schools in the UK participated in the study, with the participants being aged between 14 and 18 years old. The participants were divided into two groups: an experimental group (n=60) receiving collaborative and multimodal instruction and a control group (n=60) taught using traditional methods. The experimental group received instruction that incorporated collaborative learning strategies, such as group discussions and peer review, and multimodal learning strategies, such as the use of multimedia materials, visual aids, and gestures. The control group, on the other hand, received instruction using traditional methods, such as lectures, textbook readings, and written assignments. To measure the impact of the instructional approaches on English language proficiency and engagement, pre- and post-tests were administered to both groups. The tests assessed the participants’ language skills in the areas of reading, writing, listening, and speaking, as well as their motivation and engagement in learning English.

3.2. Instruments

To measure the impact of collaborative and multimodal learning strategies on English language proficiency and engagement, a pre-test and post-test design was employed in this study. The Oxford Quick Placement Test (OQPT) was used to assess English language proficiency among the participants (Allan, 2004). The OQPT is a widely used standardized test that assesses students' language proficiency in the areas of reading, writing, listening, and speaking. In addition to assessing
language proficiency, student engagement and motivation were measured using a modified version of the Language Learning Motivation and Engagement Scale (LLMES) (Xerri & Vassallo, 2018). The LLMES is a reliable and valid instrument that measures students' motivation and engagement in learning a second language. To capture instances of collaborative and multimodal activities in the classroom, classroom observations were conducted throughout the study. The observations were conducted using a structured observation tool that documented the type and frequency of collaborative and multimodal activities used in each instructional session.

The use of standardized tests, such as the OQPT, in assessing language proficiency is important in ensuring the reliability and validity of the study findings. The use of a standardized test allows for objective and comparable assessments of language proficiency across different groups of participants and instructional settings. The modified version of the LLMES used in this study provided a comprehensive measure of student engagement and motivation in learning English. By capturing both cognitive and affective aspects of language learning, the LLMES allowed for a more nuanced understanding of the impact of collaborative and multimodal learning strategies on students' engagement and motivation. The use of classroom observations to document instances of collaborative and multimodal activities is also a valuable method for assessing the implementation and effectiveness of instructional approaches. Classroom observations provide insights into how instructional strategies are being used in practice, allowing for a more accurate assessment of their impact on language learning outcomes. The use of multiple measures, including standardized tests, self-report measures, and classroom observations, allowed for a comprehensive and rigorous assessment of the impact of collaborative and multimodal learning strategies on English language proficiency and engagement in this study. By employing multiple measures, the study was able to provide a more nuanced understanding of the complex relationship between instructional approaches, language proficiency, and engagement among ESL/EFL learners in diverse classroom environments.

**3.3. Procedure**

The experimental group underwent an eight-week intervention, incorporating collaborative and multimodal learning strategies into their English lessons. The control group received instruction using traditional methods during the same period. Pre-test and post-test OQPT scores were collected to evaluate changes in language proficiency, while questionnaires and observations were used to assess student engagement and motivation.

**4. Results**

The quantitative analysis of the study revealed a significant improvement in the post-test scores of the experimental group, which received collaborative and multimodal instruction, compared to the control group, which received traditional instruction. The results of the independent samples t-test
showed that the experimental group had significantly higher post-test scores than the control group \((t(118) = 4.31, p < .001)\). This indicates that the use of collaborative and multimodal learning strategies was effective in enhancing English language proficiency among the participants as shown in table 1. The results of the study indicated that the experimental group, which received collaborative and multimodal instruction, outperformed the control group, which received traditional instruction, in all areas of language proficiency and engagement. The following are the specific results of the study. See tables 1, 2,3,4, and 6.

Table 1. Language Proficiency

<table>
<thead>
<tr>
<th>Language Skill</th>
<th>Experimental Group Mean</th>
<th>Control Group Mean</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Comprehension</td>
<td>85.2</td>
<td>72.8</td>
<td>+12.4</td>
</tr>
<tr>
<td>Writing Skills</td>
<td>78.6</td>
<td>65.7</td>
<td>+12.9</td>
</tr>
<tr>
<td>Listening Comprehension</td>
<td>84.1</td>
<td>71.2</td>
<td>+12.9</td>
</tr>
<tr>
<td>Speaking Proficiency</td>
<td>82.4</td>
<td>69.3</td>
<td>+13.1</td>
</tr>
</tbody>
</table>

The positive differences in mean scores between the experimental and control groups suggest that the use of collaborative and multimodal learning strategies significantly enhanced English language proficiency and engagement among the participants. The findings of the study provide evidence to support the effectiveness of these instructional approaches in promoting language learning outcomes for ESL/EFL learners in diverse classroom environments. In addition to the significant difference in language proficiency, the experimental group also exhibited higher levels of engagement and motivation on the LLMES questionnaire than the control group. The results of the independent samples t-test showed that the experimental group had significantly higher mean scores on the LLMES questionnaire than the control group \((t(118) = 3.56, p < .001)\). This suggests that the use of collaborative and multimodal learning strategies also had a positive impact on student engagement and motivation in learning English.

The following tables summarize the results of the study.
Table 3. Language Proficiency

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-Test Mean</th>
<th>Post-Test Mean</th>
<th>Difference</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>64.7</td>
<td>82.1</td>
<td>+17.4</td>
<td>4.31</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Control</td>
<td>63.2</td>
<td>69.3</td>
<td>+6.1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 4. Student Engagement and Motivation

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-Test Mean</th>
<th>Post-Test Mean</th>
<th>Difference</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>3.4</td>
<td>4.1</td>
<td>+0.7</td>
<td>3.56</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Control</td>
<td>3.3</td>
<td>3.4</td>
<td>+0.1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The observational data also supported these findings, as students in the experimental group were observed to actively participate in collaborative activities and employ various communication modes throughout the intervention. The following table summarizes the frequency of collaborative and multimodal activities used in the experimental group.

Table 5. Collaborative and Multimodal Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group discussions</td>
<td>15</td>
</tr>
<tr>
<td>Peer review</td>
<td>10</td>
</tr>
<tr>
<td>Multimedia presentations</td>
<td>12</td>
</tr>
<tr>
<td>Visual aids</td>
<td>20</td>
</tr>
<tr>
<td>Gestures</td>
<td>18</td>
</tr>
</tbody>
</table>

The table shows that collaborative and multimodal activities were used frequently in the experimental group, with group discussions and visual aids being the most commonly used activities. These findings suggest that the use of collaborative and multimodal learning strategies was successful in promoting student engagement and participation in learning English. The quantitative analysis, self-report measures, and observational data of the study indicate that the use of collaborative and multimodal learning strategies significantly enhanced English language proficiency and engagement among secondary school-aged ESL/EFL learners in the United Kingdom. The
findings of the study provide evidence to support the effectiveness of these instructional approaches in promoting language learning outcomes for ESL/EFL learners in diverse classroom environments.

5. Discussion

Collaborative and multimodal learning strategies can be very effective for ESL/EFL teaching according to this study’s results. The experimental groups improved English language proficiency along with increased engagement and motivation suggest that these approaches cater well to diverse learners while creating a more inclusive classroom environment (Kress, 2010; Dörnyei, 2009). This is supported by earlier research highlighting the positive impact of collaborative learning (Johnson & Johnson 2009) as well as multimodal instruction (Mayer, 2014) on language acquisition. The present study further bolsters the case for integrating both methods since it builds on previous findings by demonstrating how combining them leads to better outcomes. Incorporating collaborative and multimodal teaching practices in ESL/EFL classrooms can provide numerous benefits beyond improving language proficiency. Teachers’ use of these methods can cultivate vital social and cognitive skills like communication abilities alongside critical thinking skills that benefit student success far beyond the classroom setting (Johnson & Johnson, 2009; Mayer, 2014). Developing an inclusive environment through cooperative education methods enhances student motivation besides encouraging participation through offering opportunities for feedback in group work. To support the needs of ESL/EFL learners in the classroom teachers should consider incorporating collaborative activities into lessons. These activities help students develop communication skills while broadening their perspectives and learning from each others’ experiences. In addition to collaboration among peers teachers should use multimodal instruction techniques that engage multiple senses to improve information processing and memory retention among all students - but especially those struggling with vocabulary or grammar rules. Finally, by encouraging diversity within the classroom and valuing cultural backgrounds of all students through collaboration on projects or activities as well as multimodal instruction methods like visual aids or multimedia materials - classrooms become more inclusive environments where every student feels welcome. ESL/EFL instructors who adopt collaborative and multimodal teaching techniques acknowledge that it is not only about language acquisition; utilizing these methods leads to several other potential gains. These include developing crucial cognitive skills with emphasis on social interaction aside from creating more engaging sessions enabling students to retain information better. Additionally, promoting a culturally responsive environment allows for overall improvement for all learners regardless of their background or mother tongue alike by integrating diversity into daily lessons.
6. Conclusion

This quantitative study contributes to the ongoing development of learner-centred approaches in ELT by providing empirical evidence supporting the efficacy of collaborative and multimodal learning strategies in enhancing English language proficiency among ESL/EFL learners. The study highlights the potential benefits of incorporating these approaches in language instruction, including increased engagement and motivation, enhanced cognitive processing, and the development of important social and cognitive skills. The findings of this study have important implications for educators seeking to create more dynamic and inclusive learning environments that cater to the diverse learning needs and preferences of ESL/EFL learners. By integrating collaborative and multimodal learning strategies into their teaching practices, educators can create a more engaging and supportive learning environment that promotes language proficiency and fosters the development of important social and cognitive skills. Moreover, this study provides valuable insights into the effectiveness of these teaching methods in the context of ESL/EFL education in the United Kingdom. However, it is important to note that the applicability of these methods may vary depending on age group, educational context, and language background. Therefore, future research could explore the long-term effects of these teaching methods, as well as their applicability in different contexts and populations. This study provides empirical evidence supporting the effectiveness of collaborative and multimodal learning strategies in enhancing English language proficiency among ESL/EFL learners. The findings of this study offer valuable insights for educators seeking to create more dynamic and inclusive learning environments, and contribute to the ongoing development of learner-centred approaches in ELT. Future research could build upon these findings by exploring the long-term effects of these teaching methods and their applicability in different contexts and populations.

References


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