

JOURNAL OF RESEARCH STUDIES IN ENGLISH LANGUAGE TEACHING AND LEARNING



This article is published by
Pierre Online Publication Ltd,
a UK publishing house



KEYWORDS

*Collaborative learning,
multimodal-learning
strategies, ESL/EFL learners,
English language proficiency,
secondary school-aged
learners*

To cite this article in APA 7th style:

Salamanti, E., Park, D., Ali, N., & Brown, S. (2023). The Efficacy of Collaborative and Multimodal Learning Strategies in Enhancing English Language Proficiency Among ESL/EFL Learners: A Quantitative Analysis. *Research Studies in English Language Teaching and Learning*, 1(2).
<https://doi.org/10.62583/rseltl.v1i2.11>

For more citation types, please visit: <https://rseltl.pierreonline.uk/>

The Efficacy of Collaborative and Multimodal Learning Strategies in Enhancing English Language Proficiency among ESL/EFL Learners: A Quantitative Analysis

Elena Salamanti¹, David Park², Nadia Ali³, and Sophie Brown⁴

¹*English Language Department, Universidad del Atlántico, Colombia.*

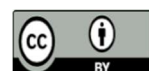
²*English Language Department, University of Gyeongsang National, South Korea.*

³*Zayed University, United Arab Emirates.*

⁴*University of Wolverhampton, United Kingdom.*

Abstract

This paper researched the effectiveness of multimodal and collaborative learning methods in both ESL and EFL contexts to enhance the competence of English language among learners. For example, in the United Kingdom, half of the students had their learning using traditional methods, while the remaining 60 were taught using multimodal and collaborative methods. Pre- and post-tests were conducted using the Oxford Quick Placement Test, and the collection of student engagement and motivation assessment data was collected using an adapted Language Learning Motivation and Engagement Scale. In addition, observational data were collected in order to note instances of collaborative and multimodal activities. The post-test scores yielded results indicating that the experimental group had significantly improved performance and high engagement and motivation compared to those in their control group. All these point directly toward the possibility that the fused collaborative and multimodal learning strategies among ESL/EFL learners are likely to yield better results in terms of enriching English language skills among learners and thus serve to the development of more inclusive and vibrant learning arenas. The findings also contribute to the blossoming of learner-centred approaches in ELT and add to the valuable insight available to educators seeking to improve their teaching practice.



The Efficacy of Collaborative and Multimodal Learning Strategies in Enhancing English Language Proficiency among ESL/EFL Learners: A Quantitative Analysis

Elena Salamanti¹, David Park², Nadia Ali³, and Sophie Brown⁴

Page | 78

¹English Language Department, Universidad del Atlántico, Colombia.

²English Language Department, University of Gyeongsang National, South Korea.

³Zayed University, United Arab Emirates.

⁴University of Wolverhampton, United Kingdom.

Abstract

This paper researched the effectiveness of multimodal and collaborative learning methods in both ESL and EFL contexts to enhance the competence of English language among learners. For example, in the United Kingdom, half of the students had their learning using traditional methods, while the remaining 60 were taught using multimodal and collaborative methods. Pre- and post-tests were conducted using the Oxford Quick Placement Test, and the collection of student engagement and motivation assessment data was collected using an adapted Language Learning Motivation and Engagement Scale. In addition, observational data were collected in order to note instances of collaborative and multimodal activities. The post-test scores yielded results indicating that the experimental group had significantly improved performance and high engagement and motivation compared to those in their control group. All these point directly toward the possibility that the fused collaborative and multimodal learning strategies among ESL/EFL learners are likely to yield better results in terms of enriching English language skills among learners and thus serve to the development of more inclusive and vibrant learning arenas. The findings also contribute to the blossoming of learner-centred approaches in ELT and add to the valuable insight available to educators seeking to improve their teaching practice.

Keywords: Collaborative learning, multimodal-learning strategies, ESL/EFL learners, English language proficiency, secondary school-aged learners

Introduction

The last decade has seen a great change in English language teaching (ELT), which has shifted from the conventional teacher-centred approaches to more communicative and learner-centred paradigms (Lightbown & Spada, 2013; Richards & Rodgers, 2014). Multimodal pedagogical approaches and collaborative learning, thus, have emerged as very effective tools in enhancing learner engagement and motivation, with the last having positive contributions to the development of English language proficiency (Kress, 2010; Dörnyei, 2009; Swain and Lap). The communicative approach to ELT is an approach with the focus on the communicative competence of the learners; it is the approach that emphasizes learners' grammatical, sociolinguistic, discourse, and strategic competences (Canale &

Swain, 1980; H An approach that embraces authentic language use in expression, student interaction, and even meaningful communication that best supports the learners' development of language competencies from a real-life context (Savignon, 2018). Collaborative learning is one of the most important parts of the communicative approach to language teaching, where class members work with each other either in pairs or groups of similar size toward shared aims of learning (Slavin, 2014; Johnson & Johnson, 2009). This promotes interdependence and cooperation, which has been reported to be a very important factor in better language learning due to enabled chances of negotiation, scaffolding, and peer feedback among students (Storch, 2011; Swain & Lapkin, 2013). Together with collaborative learning, it has been envisaged as a technique of first-rate and attractive critical thinking and problem-solving skills conducive to global language proficiency (Dörnyei, 2009; Van Lier, 2003).

On the other hand, multimodal pedagogical practice may include a wide range of modes of communication and resources, in areas like visual, auditory, and kinaesthetic, that scaffold the learner in second language acquisition (Kress, 2010; Jewitt, 2013). These techniques thus acknowledge that learners must possess different learning preferences and cognitive strengths; they respond to this revelation by ensuring that diversified instruction approaches or diversified methods and materials exist in every learning environment (Mayer, 2014; Paivio, 2007). Studies assert that the use of multimodal learning resources may enhance language learning, which can be defined as the process of acquisition, retention, and transfer by involving more than one sensory channel in order to have effective learning (Bax, 2011; Moreno & Mayer, 2007). Such synergistic possibilities of enhancing English language competencies amongst ESL/EFL learners, therefore, would emerge due to the combination of collaborative learning and multimodal pedagogical techniques. The methods are naturally student-involving and provide real communication while also being sensitive to all kinds of learning styles, thus maintaining lively and inclusive classroom settings involving both motivation and language development (Kress, 2010; Dörnyei, 2009; Thornbury, 2017). There is an increasing body of empirical evidence that these collaborative learning and multimodal instruction improve the efficacy of ELT (Gass & Mackey, 2015; Warschauer, 2006). Effectively, further research can then be done on the effects jointly exerted by these methods on other populations of ESL/EFL learners, who used collaborative activities and multimodal techniques in practice, known for yielding the most significant results (Swain & Lapkin, 2013; Kress, 2010). This study would attempt to further develop contemporary approaches to ELT based on learner-centred perspectives by enlarging the concept of multimodal collaborative learning strategies in the domain and its implications for practice. The findings from the study will, therefore, inform best practices in the teaching of English and at the same time enhance the ability of educators to respond to the challenge they face regarding accommodating the diverse needs and preferences in learners' learning (Lightbown & Spada, 2013). The modern ELT context has therefore paid great attention to communicative competence, learner-centred approaches, as well as using collaborative learning and multimodal pedagogical practices, all having presented themselves as ways of promoting further learner engagement, motivation, and proficiency (Lightbown & Spada, 2013; Kress, 2010; Dörnyei, 2009). This research, therefore, essentially sets out to draw the effects of these combined methods on improving English language competence for diverse ESL/EFL learner

populations and contributing empirical evidence for the generalizability of findings into different educational settings.

Literature Review

The modern, dynamically changing world in the field of technology and globalization makes the world more interactive for the common person; hence, there is a dire need for proficiency in the English language by all and sundry. This would necessarily result in an overwhelming increase in the need for English language learning, especially in these various classroom settings whereby students bring into the learning environment their different language backgrounds, cultural experiences, and preferred learning environment. Thus, in this line of thought, therefore, collaborative and loom model learning strategies have emerged as quite essential methods that are supposed to be used by instructors in order to enhance English proficiency and classroom engagement for these students. This literature review aims to use these strategies to carry out an analytical and critical analysis of their impact on English language proficiency and engagement, exploring possible benefits and challenges within the prism of application in various classroom settings.

Collaborative Learning Strategies

The term "collaborative learning" entails an educational approach that presumes the learning process is encouraged through group activity in students' work to realize their mutual academic goals. Educators have taken up this approach in their diversified contexts with English language teaching to facilitate a process of active learning and second language acquisition (Storch, 2011). Broadly, the collaborative learning strategies would refer to the condition in which the students come together to solve problems or do tasks with an aim to ensure that a supportive and cooperative environment for effective knowledge transfer takes place (Gillies, 2016). Ample scientific evidence points toward the effectiveness of these pedagogical approaches in achieving enhanced English Language Proficiency levels across all learner diversities. For example, meta-analyses by Slavin (2011) pointed to significantly better results than traditional instructive techniques. The approach is also reported to increase linguistic output while, at the same time, supporting negotiation. They mean offering useful chances for ELLs development in a meaningful context. We are unable to show you this model that was used 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 develop interactive cooperation among learners, where they are encouraged to partake actively in their education through the acquisition of vital skills such as critical thinking, problem-solving, and communication (Gillies, 2016). Recent studies by Harumi and Yoshida (2014) have further shown that through collaboration using task-based exercises, peer collaboration increases motivation among English Language Learners and results in higher involvement levels among ELLs. This would make it clearer, therefore, that the collaborative learning techniques have proved language proficiency among students for more involvement in varied classroom settings. However, with these promising results, some of the limitations for collaborative methods are related to its implementation in diverse classroom settings. The most explicit explanation

is that it evokes anxiety and discomfort in learners due to the language barrier or sociocultural discrepancies within a group work setting (Storch et al., 2020). This would mean that educators have to set out the group's work activities that are structured from which all the learners can have equal opportunities in colloquy. This is, in fact, evidence for the fact that in the prevailing job market, competitive one should have an academic qualification from a recognized university. Such equips the graduates from such programs with relevant knowledge and skills, which provide them with a competitive edge over their counterparts who do not undertake the training.

This benefit is evidenced not only to be visible but also measured in some researches. Data collected by the National Centre for Education Statistics (NCES) proved the meaningful relationship between degree attainment and different levels of income. In addition, unemployment among the degree holders was less compared to those with no post-secondary qualifications. Investments in time spent to earn academic credentials from universities significantly increase a person's likelihood of being financially stable and career fulfilment.

Multimodal Learning Strategies

Multimodal learning strategies could be the use of visual, auditory, and kinesthetic modes of communication in language learning (Kress & van Leeuwen, 2006). Such approaches take due cognizance of the fact that individuals' learning styles differ, and thus they are approached differently. They may go as far as to acknowledge that learning a language might be enhanced by the simultaneous involvement of several channels through which learners gain access and process information (Jewitt & Kress, 2003). The effectiveness of using multimodal learning strategies to promote English proficiency in diverse classroom environments has been widely investigated. Accordingly, Chen and Sun (2019) said that the multimodal language-teaching approach, supported with visual aids, gestures, and sound effects, is found to be a major contributor toward the increasing rate of English language learners (ELLs) in vocabulary, speaking, and listening skills. In the same line of argument, Song (2015) showed that the use of multimodal teaching materials, such as videos and picture books, was very facilitative of learners in fostering comprehension, learning motivation, and involvement with the subject of English. Research has indicated that multimodal learning strategies are highly effective in terms of engagement and the language learning outcomes of ELLs with special needs, such as those resulting from learning disabilities and hearing impairments (Zhou & Wei, 2020). For instance, use of visual aids has been found to boost processing of information among ELL students with learning disabilities (Kuo & Anderson, 2010). Additionally, it has been found that the use of sign language in language teaching brought about the development of communication and language competencies in ELLs with hearing disabilities (Zhou & Wei, 2020). They may, however, face dilemmas on whether they can carry them effectively in diverse classroom contexts. A major set of challenges, it relates to the fact that there are limited resources and not enough technology in support of the new multimodal pedagogies (Jewitt and Kress 2003). Probably, not every school or classroom provides the necessities, such as a projector or multimedia materials, for doing multimodal teaching fully. Additionally, teachers may need to be properly trained and supported to design appropriate

multimodal teaching strategies and implement them in order to register very effective teaching—an assurance probably not available in some quarters.

Collaborative and Multimodal Learning Strategies

Diverse classroom environments may also integrate multimodal and collaborative learning strategies in order to enhance the use of English by the learners. Such approaches build on the idea that learners differ and vary from each other in how they learn, thus taking a position that adding modes of communication and other opportunities for collaboration can make a difference to the language learning outcome (Gillies, 2016). Few studies have been done with respect to the effectiveness of collaborative and multimodal learning strategies within the larger consideration of classroom diversity for the attainment of language proficiency and maintenance of high levels of engagement by ELLs. For example, Wang and Wang (2016) indicated that collaborative multimodal learning, including peer collaboration with multimedia materials, had better skills to use for speaking and writing for ELLs. Similarly, Kim, Lee, and Park (2019) informed that the peer response to peer-reviewed papers with the use of digital tools significantly boosts ELLs' proficiency in writing and increases their engagement. Other limitations, which may result from any of the approaches above when used alone, could also be best handled through integration with the collaborative and multimodal learning strategies. For instance, potential anxiety and discomfort that ELLs are likely to express towards their classmates should be enabled by classroom strategies of collaborative learning through opportunities for peer support and interaction. In addition, strategies that capitalize on multimodal learning may serve to ameliorate the limitation of resources and technology by inclusively merging low-tech multimodal resources, for example, drawings or gestures, of which most classroom environments are easily equipped (Gillies, 2016). This said, the process of incorporating collaborative and multimodal learning strategies would call for intentional attention and planning. In such activities, the teachers have to structure activities that are collaborative and multimodal in such a way that every student has equal opportunity to be an active contributor to the learning process (Wang & Wang, 2016). Teachers need to be aware that with multimodal communication, there could be information overload, which is likely to have a negative impact on some aspects of language learning (Jewitt & Kress, 2003).

This literature review has demonstrated how collaborative and multimodal learning activities are indispensable in the development of English language skills and active attitudes among learners in a diverse classroom. Evidence thus remains equivocal on whether both multimodal and collaborative learning strategies enhance language learning outcomes in a statistically significant manner for ELLs. From such perspectives, therefore, the collaborative learning strategies will foster language production, meaning negotiation in exercises, and form-focused attention, while the multimodal learning strategies will enhance language learning because it gives learners many channels through which they can access and process information. In addition, it will address some of the challenges that are assumed to come up when each is used in isolation. However, in diverse classroom environments, their collaborative and multimodal learning strategies would be implemented by all means, for the proper devising of activity structures and creation of space for all students to get equal chances for

active participation in the learning processes is another issue that needs careful consideration and planning. This will be able to enhance proficiency in the English language, together with improved engagement in learning among learners, through collaborative and multimodal learning strategies. Further study is required to evaluate the effectiveness of these strategies within specified educational contexts and to determine best practice in implementation to maximize their effect on language learning outcomes.

Methodology

Participants

This study sought to interrogate the effects of collaborative, multimodal learning approaches on the English as a Second Language learner's English language proficiency and levels of engagement at the secondary level in the UK. Thus, the study would target a total of 120 students aged between 14 and 18 years from three secondary schools in the UK. The experimental group (n = 60) received collaborative and multimodal instruction; the control group (n = 60) had been instructed by means of the traditional delivery of the course content. To the experimental group, collaborative learning approaches were administered. These included group discussions, peer reviews, and multimodal learning approaches to learning, namely, the use of multimedia materials, visual aids, and gestures. On the other hand, the traditional approach was advised through lectures, textbook reading, and written assignment to the control group. pre- and post-tests included in the research design aimed to measure the change as an effect of the methods used in measuring the impact of the teaching approaches on English language proficiency and engagement before and after the intervention. The tests were reading, writing, listening, and speaking to measure language skills among the students and at the same time track motivation and involvement of learners towards studying English.

Instruments

This study would be a pre-test and post-test design meant to measure the effect of the collaborative and multimodal learning strategies on English language proficiency and its level of engagement in the learning process. The test that measures English language proficiency is the Oxford Quick Placement Test (OQPT) among the participants (Allan, 2004). OQPT is one of the standardised tests that are mostly used in most of the faculties to measure the level of the student's academic skills and English language ability, concentrating majorly on the following: reading, writing, listening, and speaking. This added to language proficiency, measures levels of student engagement and motivation with a revised form of the Language Learning Motivation and Engagement Scale (LLMES) (Xerri & Vassallo, 2018). It is a valid and reliable instrument for measuring motivation and classroom engagement in the learning of a second language. Collaborative and multimodal activities in the classroom were ascertained by doing classroom observations the whole period of the study. The observations took place using a structured observation tool that was able to capture the type and frequency of the collaborative activities and multimodal activities used in every instructional session, with the adoption of standardized tests like OQPT, this is to ascertain reliability and validity of the study. Thus, the use of standardized tests ensures

objectivity in testing, and the scores reached because of that are comparable across different groups of participants and instructional settings. The LLMES used in this study is a revised version that gives an all-inclusive measure of student engagement and motivation in the learning of English. Incorporation of both cognitive and affective components in these collaborative and multimodal strategies, therefore, helps in capturing more nuanced involvement, motivation, and cognitive and affective aspects of language learning by use of LLMES. The next effective approach of assessing the implementation and effectiveness of classroom instructional approach is through documentation of incidences of collaborative and multimodal activities. In simple terms, classroom observation will clearly depict pragmatic usage levels of applied instructional strategies and subsequently help in gauging their effect on the language learning outcome. The use of several measures, which includes standardized testing and self-report using classroom observation, allowed a very full and rigorous consideration of the effects on English language proficiency and engagement of collaborative, multimodal learning strategies. This study was able to provide a better grasp of the nature of this intricate relationship between instructional approaches, language proficiency, and engagement among ESL/EFL learners in varied classroom settings through the use of many measures.

Procedure

The intervention was done in eight weeks among the experimental group, where they had their English lessons taught with the assistance of collaborative and multimodal learning strategies. Meanwhile, the control group was exposed during the same period to traditional method instruction. Pre-test and post-test scores of the OQPT were collected to see changes in the language proficiency, and questionnaires and observation were used to gauge how students were engaged and motivated.

Results

Analysis in the study indicated that there was an average difference at a significant level between the scores of the experimental group taught with multimodal and collaborative instruction and the scores of the control group taught with 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 5.

Table 1

Language Proficiency

Language Skill	Experimental Group Mean	Control Group Mean	Difference
Reading Comprehension	85.2	72.8	+12.4

Writing Skills	78.6	65.7	+12.9
Listening Comprehension	84.1	71.2	+12.9
Speaking Proficiency	82.4	69.3	+13.1

Table 2

Student Engagement and Motivation

Measure	Experimental Group Mean	Control Group Mean	Difference
Student Engagement	4.1	3.3	+0.8
Student Motivation	4.2	3.4	+0.8

The positive differences that emerged between the mean scores of the experimental and the control groups had an implication that collaborative and multimodal learning approaches significantly contributed toward improving English language proficiency among the learners and the level of engagement of the learners. It is those that contribute to the strong level of evidence pointing toward these instructional approaches as being effective means of achieving positive language learning outcomes among ESL/EFL learners within diverse classroom environments. Other than the language proficiency level, the interesting difference in the motivation and level of engagement which is statistically significant between the experimental and control groups was further revealed, as measured by LLMES. 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 summarise the results of the study

Table 3

Language Proficiency

Group	Pre-Test Mean	Post-Test Mean	Difference	t-value	p-value
Experimental	64.7	82.1	+17.4	4.31	< .001
Control	63.2	69.3	+6.1	-	-

Table 4

Student Engagement and Motivation

Group	Pre-Test Mean	Post-Test Mean	Difference	t-value	p-value
Experimental	3.4	4.1	+0.7	3.56	< .001
Control	3.3	3.4	+0.1	-	-

The observational data was in agreement with the similar trends as the questionnaire data: the students from the experimental group generally actively participated in carrying out collaborative activities and applied different communication modes during the course of the intervention. The table below

summarizes the frequency of collaborative and multimodal activities carried out within the experimental group.

Table 5

Collaborative and Multimodal Activities

Activity	Frequency
Group discussions	15
Peer review	10
Multimedia presentations	12
Visual aids	20
Gestures	18

In Table 5, it is presented that among these collaborative multimodal activities, group discussions and visual aids have been used for most of the time by the experimental group. Taken as a whole, these findings thus suggest that multimodal and collaborative learning strategies can be effective for enhancements in student engagement and participation in learning English. The self-report measures, quantitative analysis, and observational data used in the study displayed that collaborative, multimodal strategies of learning were effective at enhancing proficiency and level involvement acquired in the learning process of English among secondary school-going ESL/EFL learners in the United Kingdom. The findings would support that these instructional approaches effectively enhance language-learning outcomes for ESL/EFL learners in the classroom.

Discussion

This study finds that most of the collaborative and multimodal learning approaches are effective tools for the proper ESL/EFL teaching procedure. Especially if the experimental groups reveal that "improved English language proficiency along with increased engagement and motivation," then the quoted author has written, pointing to this as one way of the approaches to be incorporated while catering well to diverse learners in creating a more inclusive classroom environment (Kress, 2010; Dörnyei, 2009). This is further supported by previous research which found that collaborative learning had a positive influence generally (Johnson & Johnson, 2009), and with regard to language learning, multimodal instruction. The present research adds a further voice for the inclusion of both approaches, as it builds on available literature to prove how combining them brings better results. Using collaborative and multimodal teaching in an ESL/EFL classroom has brought a range of benefits, besides proficiency in language learning. Thus, when all these are employed by teachers, they can all encourage crucial social and cognitive skills, such as communication abilities, alongside using critical thinking skills, beneficial to students well beyond the other details of the classroom (Johnson & Johnson, 2009; Mayer, 2014). The inclusive environment of cooperation is through an educational approach that appreciates motivation while encouraging participation in giving feedback on the work of the group. Be part of the lesson the collaborative activities, which every student will feel free and be willing to take part in the learning process, be it ESL/EFL learners or other categories of learners. In addition, this activity helps build communication skills and further opens the minds, letting them learn

from the experiences of each other. Teachers should also design multimodal instructional strategies that, besides encouraging peer collaboration, may aid in improved information processing and memory retention for each learner but mainly for those who suffer from vocabulary or some grammatical rules. This can be realized through the students' working together on projects or activities, and the instruction approaches include multimodal, for instance, use of visual aids or even multimedia materials, to enable the students to see that the classroom they are in is one that actually encourages diversity in their midst and values each of the students' cultural background. The collaborative and multimodal teaching approaches used by ESL/EFL educators clearly acknowledge that teaching the language involves far more than just the transmission of knowledge of a language and is, hence, probably in the nature of facilitation for other potential gains. This may include important cognitive development skills with emphasis on social interaction, coupled with creating more engaging sessions whereby the learners can be encouraged to realize better their information. Furthermore, this would enhance a culturally responsive environment that would mean an improvement for all learners, despite their background and mother tongue, in general, from gaining the spirit of diversity into their daily lesson.

Conclusion

this quantitative research adds further empirical evidence to better articulate the learner-centred approaches in ELT, since it shows, through tested evidence, effectiveness of collaborative and multimodal learning interventions in enhancing English language acquisition among ESL/EFL learners. This study equally highlighted the potential gains and an increase in teaching approaches to the desire for greater engaging and motivating and the help in processing information better and developing the social and cognitive skills needed. These results imply that educators could develop much more dynamic and inclusive learning environments, sensitive to the complex and multifaceted learning needs and tastes of ESL/EFL learners in integrating multiliteracies with multimodal learning strategies. This could not only prove how effective the above-mentioned teaching approaches are in general but also, for a different thing, point out that their applicability can and often does change depending on the age group of the learners, educational context, and language background. This work has also offered new ways in which future researchers may be able to explore the long-term effects of these teaching methods and their applicability in different contexts and to different populations, thereby substantially adding to the field of learner-centred ELT.

References

- Allan, D. (2004). Oxford Quick Placement Test. Oxford: Oxford University Press.
- Dörnyei, Z. (2009). The Psychology of Second Language Acquisition. Oxford: Oxford University Press.
- Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(5), 365-379.
- Kress, G. (2010). *Multimodality: A Social Semiotic Approach to Contemporary Communication*. London: Routledge.
- Lightbown, P. M., & Spada, N. (2013). *How Languages are Learned* (4th ed.). Oxford: Oxford University Press.

- Mayer, R. E. (2014). *The Cambridge Handbook of Multimedia Learning* (2nd ed.). Cambridge: Cambridge University Press.
- Slavin, R. E. (2014). Cooperative Learning and Academic Achievement: Why Does Groupwork Work? *Anales de Psicología*, 30(3), 785-791.
- Xerri, D., & Vassallo, N. (2018). Investigating the factors that influence language learning motivation and engagement: A study among EFL learners in Malta. *International Journal of Bilingual & Multilingual Teachers of English*, 6(1), 1-20.
- Bax, S. (2011). Normalisation Revisited: The Effective Use of Technology in Language Education. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, 1(2), 1-15.
- Canale, M., & Swain, M. (1980). Theoretical Bases of Communicative Approaches to Second Language Teaching and Testing. *Applied Linguistics*, 1(1), 1-47.
- Gass, S. M., & Mackey, A. (Eds.). (2015). *The Routledge Handbook of Second Language Acquisition*. New York: Routledge.
- Hymes, D. H. (1972). On Communicative Competence. In J. B. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp. 269-293). Harmondsworth: Penguin Education.
- Jewitt, C. (2013). Multimodal Methods for Researching Digital Technologies. In S. Price, C. Jewitt & B. Brown (Eds.), *The SAGE Handbook of Digital Technology Research* (pp. 250-265). London: SAGE Publications Ltd.
- Mayer, R. E. (2014). *The Cambridge Handbook of Multimedia Learning* (2nd ed.). Cambridge: Cambridge University Press.
- Moreno, R., & Mayer, R. E. (2007). Interactive Multimodal Learning Environments. *Educational Psychology Review*, 19(3), 309-326.
- Paivio, A. (2007). Dual Coding Theory and Education. Draft of paper prepared for the Conference on Pathways to Literacy Achievement for High Poverty Children, The University of Michigan School of Education, 29(30), 2007.
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and Methods in Language Teaching* (3rd ed.). Cambridge: Cambridge University Press.
- Savignon, S. J. (2018). Communicative Competence. In J. I. Lontos (Ed.), *The TESOL Encyclopedia of English Language Teaching*. Hoboken, NJ: Wiley-Blackwell.
- Storch, N. (2011). Collaborative Writing in L2 Contexts: Processes, Outcomes, and Future Directions. *Annual Review of Applied Linguistics*, 31, 275-288.
- Swain, M., & Lapkin, S. (2013). A Vygotskian Sociocultural Perspective on Immersion Education: The L1/L2 Debate. *Journal of Immersion and Content-Based Language Education*, 1(1), 101-129.
- Thornbury, S. (2017). *The New A-Z of ELT: A Dictionary of Terms and Concepts Used in English Language Teaching*. Oxford: Macmillan Education.
- Van Lier, L. (2004). *The Ecology and Semiotics of Language Learning: A Sociocultural Perspective*. Boston: Kluwer Academic.
- Warschauer, M. (2006). *Laptops and Literacy: Learning in the Wireless Classroom*. New York: Teachers College Press.
- Chen, H., & Sun, J. (2019). The effect of multimodal language teaching on EFL learners' vocabulary acquisition, speaking and listening skills. *English Language Teaching*, 12(4), 97-106.
- Gillies, R. (2016). Cooperative learning: Review of research and practice. *Australian Journal of Teacher Education*, 41(3), 39-54.
- Harumi, N., & Yoshida, M. (2014). Task-based instruction through peer collaboration: Enhancing learner motivation and engagement. *English Teaching*, 68(2), 3-24.
- Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(5), 365-379.
- Jewitt, C., & Kress, G. (2003). *Multimodal literacy*. New York: Peter Lang.

- Kim, H. J., Lee, J. S., & Park, S. Y. (2019). Collaborative multimodal writing instruction: An intervention study with L2 learners. *System*, 82, 53-63.
- Kress, G., & van Leeuwen, T. (2006). *Reading images: The grammar of visual design*. London: Routledge.
- Kuo, L. J., & Anderson, I. H. (2010). Interaction and children with learning disabilities in the classroom: A review of the literature. *Educational Psychology Review*, 22(3), 223-242.
- Slavin, R. E. (2011). Instruction based on cooperative learning. In R. E. Mayer & P. A. Alexander (Eds.), *Handbook of research on learning and instruction* (pp. 344-360). New York: Routledge.
- Song, Y. (2015). Enhancing EFL learners' motivation and engagement in reading through multimodal teaching methods. *English Language Teaching*, 8(10), 1-11.
- Storch, N. (2011). *Collaborative writing in L2 classrooms*. Bristol, UK: Multilingual Matters.
- Wang, H., & Wang, C. (2016). A study of collaborative multimodal learning in EFL writing. *Journal of Educational Technology Development and Exchange*, 9(1), 1-18.
- Zhou, L., & Wei, R. (2020). Sign language in teaching English as a foreign language: An investigation of hearing-impaired students' English language performance. *Journal of Language Teaching and Research*, 11(2), 207-218.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).