

# **The Impact of Technology-Assisted Cooperative Learning on Developing Omani 8<sup>th</sup> Graders' English Writing Skills**

**By:**

**Ms. Fatima Ba-Omar**

Master of Educational Administration, Dhofar University, Oman

**Dr. Alaa Aladini,**

Assistant professor of curriculum and English teaching methods,  
TEFL, Dhofar University, Oman

**Dr. Mahmoud Jalambo,**

Assistant professor of curriculum and English teaching methods,  
TEFL, Dhofar University, Oman

**Dr. Raed Abdelkarim**

Assistant professor of curriculum and teaching methods, Dhofar  
University, Oman



## The Impact of Technology-Assisted Cooperative Learning on Developing Omani 8<sup>th</sup> Graders' English Writing Skills

**Ms. Fatima Ba-Omar, Dr. Alaa Aladini,  
Dr. Mahmoud Jalambo, Dr. Raed Abdelkarim \***

### Abstract:

Writing is one of the essential skills in any language. However, teaching it to learners can be one of the most challenging things in the educational process. Plenty of students in Oman find writing to be the most difficult aspect of English. Therefore, teachers try to adapt and adopt several teaching and learning methods to help students overcome this issue. One of these methods is technology-assisted cooperative learning. This may have a useful influence during classroom teaching. This study aims at investigating the impact of using technology-assisted cooperative learning among 8<sup>th</sup> graders to improve their English writing skills. The sample was 64 students enrolled in the 8th level at Um Saleem School in Dhofar governorate, Oman. The design of the study is quasi-experimental as the sample was chosen purposely but assigned randomly into equivalent control and experimental groups. The quantitative design was utilized as the participants took a pre and post-test to gather the needed data. The collected data was analyzed using SPSS to provide detailed results. Based on the data analysis, the technology-assisted cooperative learning method is effective in improving students' writing. Also, it is more effective than other teaching methods implemented by English teachers in Omani schools. Additionally, the researchers

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\***Ms. Fatima Ba-Omar:** Master of Educational Administration, Dhofar University, Oman.

**Dr. Alaa Aladini:** Assistant professor of curriculum and English teaching methods, TEFL, Dhofar University, Oman.

**Dr. Mahmoud Jalambo:** Assistant professor of curriculum and English teaching methods, TEFL, Dhofar University, Oman.

**Dr. Raed Abdelkarim:** Assistant professor of curriculum and teaching methods, Dhofar University, Oman.

recommend teachers apply technology-assisted cooperative learning techniques in their classrooms to enhance their students' writing skills.

**Keywords:** technology-assisted cooperative learning, writing skills, Omani 8<sup>th</sup> Graders'

## Introduction

Language is one system that helps us communicate and share our feelings, perceptions, thoughts, and ideas. Usually, languages consist of four core skills: reading, writing, listening, and speaking. According to Widdowson (2003), language consists of systematic symbols that enable interactions and communications among all members of a given culture. Besides that, since English is the universal language of communication, technology, and science, learning it has become crucial for individuals all over the world. Oman is cognizant of the value of English in helping students communicate and share their knowledge and experiences with people around the world. As a result of that, learning English is required in the Omani educational system. From the first grade to the twelfth, students are required to take English classes. After graduating from school, students continue to learn English because most majors at Omani colleges and universities are taught in English. Therefore, it is important to help Omani students to enhance their language skills.

There are four main aspects of the English language. These aspects are basic skills such as reading, writing, listening, and speaking. Writing is one of the most significant skills in teaching and learning English as a second or foreign language as it allows learners to express themselves, communicate, and share their ideas, thoughts, and emotions. However, several reasons make teaching and learning writing difficult for both teachers and learners. According to Klein (2013), “Time, lack of resources and knowledge are the top reasons why teachers struggle teaching writing.” Due to that, the Omani Ministry of Education developed a curriculum that focuses on this crucial skill along with other receptive and productive skills. Moreover, the Ministry of Education in Oman is aware of the significance of writing for schools and the world beyond it. It tries to improve student’s writing skills by encouraging teachers to adopt and adapt several teachings and learning approaches, strategies, and aids. Teachers are responsible for ensuring the fact that they use many effective methods to support their students’ learning process (Aladini, 2023 and Almarshani et al. 2023). This emphasizes that teachers need to use various and effective methods and materials to facilitate learning and mastering writing skills.

One crucial learning method that is used to motivate students and encourage them to learn and acquire English as a foreign language or second language is online cooperative learning. E-Cooperative Learning (ECL) helps students actively engage and interact in the teaching and learning process by working with other learners. Thus, teachers can reinforce and improve students' ability to master or develop their writing skills by implementing this method in the classroom.

The extensive adoption of mobile devices and wireless technologies has greatly enhanced the possibilities of e-learning in terms of its widespread availability, omnipresence, customization, and adaptability. Simultaneously, as globalization and internationalization have intensified in recent years, English has emerged as the global language of communication, given its extensive usage in academia, electronics, commerce, and technology (Alastal et al., 2022).

Accordingly, this study aims at investigating the impact of using technology-assisted cooperative learning on improving eighth graders' English writing skills at Um Saleem School, in Salalah, Oman. Also, it strengthens learners to write correctly in English and motivates them to practice writing to enhance their writing skills by working with their colleagues. In this regard, this research is dedicated to testing the effectiveness of implementing the cooperative learning method in developing the writing skills of grade eight.

### **Problem of the Study**

From the researchers' experience in the field of teaching, it was clear that many students in Oman face several writing problems as spelling, coherence and cohesion, paragraph structuring, and grammar. The researchers had explored previous studies to find a solution to tackle these writing problems. They found that technology-assisted cooperative learning strategies are effective in helping students understand and master writing skills. Thus, they tried some cooperative learning strategies and students performed well during their writing. Additionally, many researchers confirm the effectiveness of using technology-assisted cooperative learning (TACL) in enhancing students writing skills in English. Li (2023) claims that online cooperative learning leads to

positive teaching and learning outcomes and products. Besides that, ECL can enhance learners' performance in different language features and general positive social outcomes. Further, the English senior teachers of English at Um Saleem schools claim that teaching and learning writing is easier and more fruitful when learners are working together in groups as it will not consume a lot of time and will keep students active, engaged, and less intimidated to try and make mistakes. Also, as mentioned earlier, a number of pupils from Um Saleem schools face several challenges with writing in English. However, with the continuous use of conventional teacher-centered and lecturing-based methods such as the Grammar-Translation method, it will be difficult for those learners to overcome their writing difficulties. Therefore, applying online cooperative learning strategies in Omani classrooms will not only help students improve their writing skills, but according to Aladini (2023), it will also ensure positive relationships between learners. This study will investigate the effect of using technology-assisted cooperative learning on enhancing 8th graders' English writing skills in Dhofar governorate, Oman. They used different technology-based apps which are used in the cooperative environment to improve the student's writing skills. The apps which the researchers used were Telegram, WhatsApp, Padlet, and Kahoot.

### **Question of the Study**

**The main question is** "Are there statistically significant differences at  $\alpha \leq 5.0$  in the mean scores the post application of the writing skills test between experimental and control group?" and the Hypotheses of the Study accordingly, "There are no statistically significant differences at the level of ( $\alpha \leq 0.05$ ) between the mean scores of the post application of writing skills test between the control group and the experimental group".

### **Objectives of the Study**

1. Examine the effect of using technology-assisted cooperative learning on improving 8<sup>th</sup> graders' English writing skills.
2. Identify the effective technology-assisted cooperative learning strategies that improve EFL learners' writing.

### **Importance of the Study**

The present study will reveal the effectiveness of using technology-assisted cooperative learning in improving learners' writing skills in English. Additionally, it will illustrate several CL examples and implementations that English language teachers can use in their classes. Furthermore, it will enrich the Omani scientific library with new research and an undiscussed topic.

### **Delimitations of the Study**

The main purpose of this study is to investigate the impact of using technology-assisted cooperative learning on improving the 8<sup>th</sup> graders' English writing skills. The study focused on using some CL strategies including group and pair work. In addition, the researchers limited the study to 30 female students from grade eight enrolled in Um Saleem School in Dhofar, Oman. Finally, the study is quantitative in nature and has cross-sectional data.

### **Literature Review**

According to Roberts (2023), "Cooperative learning is an instructional method in which learners work together in small groups to achieve a common educational goal, actively engage in the learning process, and support each other's success." While Smith (2023), states that CL is a teaching and learning approach where students work in groups to achieve a common objective and accomplish a specific task while developing their individual learning and interdependence.

This teaching approach makes maximum use of collaborative activities such as group or pair work in the classroom to facilitate learning.

### **Concept of technology-assisted cooperative learning (TACL):**

It is an instructional approach where learners are divided into small or large groups consisting of one or more learners who work together to achieve specific and shared goals. This is done through the exploration of topics accompanied by activities and online assessments, facilitated by their interaction with an educational website designed for this purpose, using both synchronous and asynchronous communication tools available over the Internet. This occurs according to specific instructions

and procedures, under the supervision, guidance, and monitoring of the teacher.

Now, instead of students sitting together in a classroom, they can collaborate while being in different locations around the world through the Internet. Each learner completes assigned tasks and activities at any time and place using synchronous and asynchronous interactive tools available online, through an educational website that provides various electronic learning materials and resources, encouraging collaboration and based on cooperative learning strategies and principles (Aladini et al. 2024).

Collaboration online among students takes place through the Internet using synchronous communication through text, audio, and video conferences and remote discussions, or asynchronous communication using email, bulletin boards, forums, file transfer, web pages, and service lists. Therefore, collaborative e-learning online is a strategy that enables learners to learn and work together.

### **The Importance of technology-assisted cooperative learning:**

Cooperative learning online enables learners to discuss, argue, negotiate, and participate in knowledge building through the process of discussion and interaction with peers and experts, whether through conferences or through accessing books, journals, articles, or research groups. There is a web-based system called Basic Support for Cooperative Work (BSCW) that supports collaborative work by allowing shared workspace, document upload, event notification, and group management.

The academic importance of cooperative learning lies in developing students' critical thinking skills during training in higher-order thinking skills, helping them clarify ideas through discussion, enhancing skill development and practice, improving communication skills, and enhancing the process of recalling textual content through cooperative discussions. It provides an active learning environment that encourages students to engage in exploratory learning, master skills, take responsibility for learning, effectively manage situations, and provide effective teaching strategies, thereby improving classroom outcomes through positive student attitudes towards learning and successful

competition in task performance. It also equips students with self-management skills and problem-solving approaches by involving low-achieving students in groups with higher-achieving students, thus helping them improve their performance (Aladini, 2020)

Cooperative learning has psychological importance as well, as it increases students' self-respect, helps reduce anxiety, enhances students' psychological satisfaction with the learning experience, encourages students to accept help and supervision from their peers, and fosters positive attitudes towards teachers or trainers.

Online collaboration and group projects offer valuable educational experiences and focus on student-centered learning by providing opportunities for using multiple learning methods, training communication skills, practicing critical thinking, as well as dividing work and participating in oral discussions that occur during project work among group members. These activities have cognitive benefits for students, increase students' motivation to seek information and explore various new and challenging areas with the help of the group, and improve and develop student skills such as analysis, communication, and evaluation

### **Principles and Foundations of technology-assisted cooperative learning:**

Technology-assisted cooperative learning relies on various strategies based on a set of principles and foundations that are essential for effective learning. These principles can be summarized as follows:

#### **a. Positive Interdependence:**

Positive interdependence refers to the recognition by each group member of the close connection among them, understanding that the success of any individual is dependent on the success of others. It is important to work in a way that benefits the entire group, fostering collaboration within the group to achieve goals. Positive interdependence is achieved through actions such as sharing goals, tasks, reinforcement methods, resources, and roles within each group (Aladini et al. 2023).

**b. Sharing goals**

This means engaging the group in a common task or accomplishing shared work, such as writing a report or gathering information about a phenomenon. Sharing reinforcement means that each group member receives material or moral rewards. Sharing resources means that group members have access to various sources that provide necessary information for learning. Sharing roles involves the exchange of roles among group members to facilitate learning. Roles may include encourager, leader, observer, and recorder.

**c. Participation in the task**

It means that all group members participate in a single task, even if it is divided, resulting in the integration of the task in the end.

**d. Individual Accountability:**

This principle emphasizes that individuals within the groups should be held accountable on an individual basis. Tests and assessments should not allow collaboration, which prevents individuals from relying solely on their peers' efforts. Recognizing that individual efforts contribute to achieving personal and group goals motivates individuals to be active and perform better.

**e. Direct Interaction among Students:**

This principle promotes active participation and mutual support among group members, ensuring that they interact directly with each other. It provides social patterns and influences that enhance motivation for learning.

**f. Personal Skills:**

This principle involves utilizing personal skills within the group, no matter how small it is. Some personal skills that individuals should possess include leadership, decision-making, building trust, communication, conflict management, and resolution.

**g. Group Operation:**

This principle is based on analyzing the team members' actions to determine the extent to which they utilize the necessary social skills to strengthen their natural relationships. This facilitates effective communication skills and healthy working relationships that achieve desired goals.

## **Requirements for Implementing Assisted Technology Cooperative Learning:**

### ***First: Dealing with Information and Communication Technology:***

Working online relies on learners' ability to handle information and communication technology online. Learners should be proficient in various skills such as using educational websites, conducting research across different sites, and acquiring skills for file upload and download. Additionally, learners should be capable of utilizing web communication tools such as online meeting software, chat rooms, audio and video conferencing, as well as email and mailing lists.

### ***Second: Motivation:***

Psychological and personal characteristics can strongly influence the desire to engage in this learning approach. It can pose challenges, especially for students who possess certain traits or characteristics, such as self-esteem issues, resistance to guidance from others (especially peers), lack of motivation for collaborative work, tendency towards isolation and introversion, belief that they can perform better individually, desire for self-reliance in task performance, resistance to accepting others' work even if it is good, inability to tolerate differences in perspectives with others, self-centered thinking and actions, and monopolizing all activities, tasks, and opinions.

### ***Third: Managing Online Collaborative Work:***

Managing collaborative work online is an important aspect to consider when implementing technology-assisted cooperative learning. It involves the ability to select the work team, handle team members' withdrawal, provide incentives for online collaboration, exchange opinions with all team members simultaneously and offer suggestions, attempt to cover all content details, develop leadership and initiative skills for decision-making, activate all remote communication tools to achieve positive interaction and communication with the teacher to overcome obstacles.

### ***Fourth: Time Management:***

Time is an important and influential factor in learning, and it must be effectively managed. There are some time-related problems that

negatively impact technology-based cooperative learning, such as the inability to complete tasks within the required time, insufficient time for performing certain skills, the need for dedicated time for meetings, poor time organization by some group members, and some individuals' inability to deliver projects and tasks within the specified time.

### **Writing Skills**

#### **Definition of Writing**

According to Gaiman (2023), Writing is a magical process that enables us to capture the essence of our ideas, emotions, and experiences on paper or screen, creating a tangible manifestation of our inner worlds. Building upon this idea, Adichie (2022) asserts that Writing is the act of liberation and the vehicle for social change by giving a voice to the silenced and shedding light on the untold stories. Moreover, writing means sharing, explaining, and passing on one's ideas, perceptions, thoughts, and emotions to the outside world using different ways. For example, through writing novels, stories, blogs, academic essays, persuasive essays, and others. Additionally, writing is the most concrete and careful part of any language. If one's writing skills are advanced, then this person will be able to write more freely and systematically (Iftanti, 2016 and Aladini and Jalambo., 2021b). These statements illustrate the meaning of writing and highlight its great power as well as emphasize its ability to bridge the gap between reality and imagination. Further, writing is not only centered around the physical act of writing. Rather, it contains many skills such as thinking, searching, planning, outlining, organizing, editing, revising, spelling, grammar, and numerous other skills that are considered important parts of the writing process. Additionally, writing serves as a tool for personal expression and knowledge imparting. In other words, writing allows people to communicate and deliver their ideas, feelings, and thoughts and impart their knowledge to others. Thus, an excellent writer is one who can communicate his or her point to the audience without using fluff and in an easy, fluent, and interesting way. Therefore, teachers need to develop and enhance learners' writing skills using different teaching and learning methods, strategies, and materials. Teachers are responsible for ensuring

the fact that they use many effective methods to support their students' learning process (Gersten, et al., 2005, and Aladini et al. 2022).

### **Significance of Writing**

Writing is one of the most significant skills in English. It is a paramount form of expression and communication that holds immense significance in our society. It allows people to preserve and transmit knowledge, ideas, and stories across generations, fostering collective learning and cultural evolution (Aladini, 2023.). Writing provides a platform for individuals to share their thoughts, emotions, and perspectives, enabling self-reflection, self-expression, and personal growth. Additionally, it serves as a powerful instrument for advocacy, empowerment, and social change, giving voice to communities and shedding light on important issues and topics. Moreover, writing develops critical thinking, creativity, and analytical skills, encouraging individuals to explore complex concepts and develop coherent arguments. Ultimately, writing is the foundation of effective communication that empowers individuals to connect with others and shape the world through the power of words (Prasad et al., 2023, Aldeeb and Aladini, 2021; and Aladini and Jalambo., 2021a).

### **Types of Writing Skills**

There are many different types of writing. One example is persuasive writing. For this writing type, the writer tries to convince and induce the reader of a certain situation or argument. This type focuses on the writer's opinion, justifications, and evidence to support his or her claims. Another example is narrative writing. It is often a long writing sample. The goal of this type of writing is to share information as a story. Narratives should include characters, settings, and conflicts. Besides that, expository writing is another type of writing. This type focuses on expressing a concept and sharing information with broader audiences. Expository writing gives evidence, statistics, or outcomes about a certain topic. This type is not meant to give opinions. Finally, descriptive writing. This type of writing is utilized to describe and illustrate things to create a proper picture in the minds of the readers. This style enables the readers to feel more linked to the writing by appealing to their senses.

This writing type usually uses literary devices like similes, metaphors, allegories, and others to engage the audience.

An empirical study for Li (2023) investigates the influence of online collaborative writing instruction on the writing performance, writing self-efficacy, and writing motivation of Chinese English as a foreign language (EFL) learners. The research was conducted at a language school in mainland China with 58 participants divided into an experimental group (n=30) and a control group (n=28). The findings revealed that the experimental group exhibited significantly greater improvement in writing performance, motivation, and self-efficacy compared to the control group. These results indicate the positive impact of incorporating Tencent Docs into collaborative writing instruction. Similarly, Aghajani, M. and Adloo, M. (2018) aimed to investigate e-cooperative learning on writing, the sample was a total of 70 university ESP learners. Telegram, as the treatment in this study was compared to a conventional method; face-to-face in the cooperative writing activities. A pre-test was administered to all students and based on the preliminary results; students were divided into Telegram and face-to-face Cooperative writing groups. After using both approaches, a post-test was given to participants. Then, a questionnaire was given to the students in order to investigate the effect of Telegram on the attitudes of ESP vocabularies and expressions by the ESP learners. The data were then analysed using independent t-tests and paired sample t-tests. From the findings, it was found that participants in Telegram Cooperative writing groups displayed slightly higher scores compared to face-to-face Cooperative writing groups. However, the differences between Telegram and face-to-face Cooperative writing groups were not significant in the post-test writing scores. When comparison was made within each group, this study found that there were significant differences in overall writing performance, content, organization, vocabulary, language use and mechanics. The results also indicated that the students had positive attitudes toward using telegram Cooperative learning. In the same concern, Alyafaei and Mudhsh (2023) investigated online collaborative learning on EFL students' writing skills. The findings showed that the

implementation of online collaborative learning effectively facilitates the instructional and educational endeavors of both educators and learners.

### **Method**

The research followed a quasi-experimental design. This quantitative data was collected to examine the impact of ATCL on improving learners' writing skills. The study has one control group and another experimental group. The school from which the two groups (experimental and control) was purposively chosen, but the participants were randomly assigned to the control group and experimental group. Furthermore, both groups were equivalent in the age and achievement variables. Finally, the researchers designed a writing test as a data collection tool from the participants.

The researchers used different technology-based environment tools and apps in the online cooperative environment so as to improve the students' writing skills. The apps which the researchers implemented were Telegram, WhatsApp, Padlet, and Kahoot.

### **Sampling**

The participants were in grade 8, aged 13-14 years old. The study sample consists of 64 female students. The sample was randomly assigned into a control and experimental group. Each group consists of 32 students. Both groups were asked to sit for a pre-test and post-test to measure the effectiveness of the manipulation.

### **Instrumentation**

The researchers designed a writing test to measure the students' ability to respond to writing skills. The test was created by the researchers to achieve the aim of this study, collect the needed data, and measure students' writing skills before and after the intervention. Also, this writing test tries to measure several important subskills of writing. In other words, each question in the test is aimed at testing one crucial writing subskill. These subskills of writing were; forming correct sentences, answering factual questions, punctuating a sentence, and writing an email. Also, the criteria for assessing students' writing competency were grammar, relevance, word choice, pronunciation, and others. The test contains four questions investigating the following

writing sub-skills: forming sentences, writing an email, punctuation and answering factual questions. The total mark was 20.

The researchers examined the validity of the tool before using it by giving it to jury professors universities and expert teachers at schools to check its suitability. The validity and clarity of the task instructions, questions, marking rubric, and the appropriateness of the language used in the writing test were examined by university professors. After that, the researchers edited and modified the tool based on the referee's comments and feedback.

### **Data Collection Tools**

The gathered data from the pre-post test scores of the two groups was summarized and tabulated to be analyzed using SPSS. This means that the Standard Deviation, Mean, and Variance of pre-test and post-test scores were analyzed. Furthermore, to measure the differences in the achievement scores of the control group and experimental group, the t-test was utilized.

### **Results**

A pre-post writing test was designed and handed out to the control group as well as the experimental group at in the beginning and the end of the study to measure the impact of applying (AT) on improving 8<sup>th</sup> graders' writing skills in English.

**The study question was: Are there statistically significant differences at  $\leq 5.0$  in the students' mean scores of the post application of the writing skills test between the experimental and the control group?**

To verify the significance of the differences between the mean scores of the experimental group students and the average scores of the control group students in the post application, the researchers tested the following null hypothesis: **There are no statistically significant differences at the level of ( $\alpha \leq 0.05$ ) Between the mean scores of the experimental group students and the average scores of the control group students in the post application of writing skills test.** The researchers used a t-test for two independent samples. And the table (1) shows the results of the null hypothesis test:

Table (1): T-test results for two independent samples between the averages of the experimental and control groups in the post-application of the writing skills test.

Domain	G.	No	M	SD	T	Sig. value
Forming Sentences	Con.	32	3.29	1.53	5.52	0.001
	Exp.	32	4.83	0.32		
Answering Factual Questions	Con.	32	5.32	1.40	3.0	0.004
	Exp.	32	6.22	0.89		
Using Sentence Punctuation	Con.	32	3.28	0.83	3.66	0.001
	Exp.	32	3.87	0.28		
Email Writing	Con.	32	2.32	1.17	3.69	0.001
	Exp.	32	3.23	0.71		
Total	control	32	14.32	3.57	5.80	0.001
	Experimental	32	18.29	1.37		

It is evident from Table (1) that the probability value (Sig.) reached (0.001), which means that there are no statistically significant differences between the averages of the experimental group and the control group in the pre-knowledge of the English writing skills test for 8<sup>th</sup> grade students.

### **Discussion and conclusion**

The analyzed data of the present study show that using the cooperative learning method to teach writing is more effective than using traditional methods such as GTM among learners. There is a difference between the two groups' pre-test and post-test scores regarding their writing skills. Besides, the outcomes also exhibit that learners in the experimental group achieved higher scores in English writing comprehension than the control group. Hence, it can be claimed that implementing cooperative learning techniques will have a positive impact on the achievement of the 8th graders' writing skills. In addition to that, the findings of many other researchers are almost the same.

One good example is Wung, and Ju Wu (2022) who investigated Student-based educational philosophy aims to combine instructional methods with cooperative learning to allow students to change from passive learning to active knowledge construction, reduce students' learning motivation and passion, and enhance students' self-learning effectiveness. Focusing on college students in Fujian Province as the

research sample, 360 copies of a questionnaire were distributed for this study. After deducting invalid and incomplete ones, 298 copies remained, with a retrieval rate of 83%. The research results showed significantly positive correlations between online cooperative learning and problem-solving ability, problem-solving ability, and learning satisfaction, and online cooperative learning and learning satisfaction. According to the results, it is expected, in the digital era, to integrate information technology into the teaching environment and focus on learning objectives to create teaching software with a user-friendly interface, simple operation, learning process recording, and an interactive learning community in the teaching-learning process to develop the characteristics and effectiveness of digital teaching and learning.

Li (2023) investigates the influence of online collaborative writing instruction on the writing performance, writing self-efficacy, and writing motivation of Chinese English as a foreign language (EFL) learners. The findings revealed that the experimental group exhibited significantly greater improvement in writing performance, motivation, and self-efficacy compared to the control group.

The researchers used different technology-based environment tools and apps which were used in the online cooperative environment so as to improve the students' writing skills. The apps which the researchers used were Telegram, WhatsApp, Padlet, and Kahoot.

Combining effective educational methods with online learning can be beneficial and improve learning outcomes. Both cooperative learning and online learning involve socialization in education. Online cooperative learning helps students develop autonomy and creativity in their learning. Network-based cooperative activities provide students with access to peers and teachers, motivating them to learn more effectively. Telegram as one of the study materials, a popular social networking platform, has a large user base ranging from primary school students to university students. On Telegram, users of all ages can create profiles, chat with others, and share photos and videos. Additionally, Telegram offers features that are useful for teaching and learning purposes

The research revealed that the students who were taught using cooperative learning managed to get higher post-test scores on writing comprehension in English than the others who were taught using the ordinary method. Hence, it can be concluded that ECL has a positive effect on the achievement of eighth-grade learners in English writing skills and comprehension. Another point to mention is that the eighth graders who were taught using ECL felt more engaged, involved, and motivated. This leads to the conclusion that they will continue adopting this pattern again.

### **Recommendation**

Some recommendations were suggested based on the previous results and conclusion. To begin with, it is recommended that English language teachers implement ECL and activities in the classrooms to facilitate learning the required writing skills as well as to enable learners to enhance their writing comprehension by working with each other. Further, teachers are recommended to carefully plan their lessons and try to include at least one or two ECL and activities such as group work, pair work, interactive discussions, and others in each lesson. This is because learners learn better from their peers and friends as they feel less afraid of trying and making mistakes. On top of that, teachers are recommended to pay attention to their students' problems and try to tackle them using appropriate solutions. Additionally, it is recommended that teachers of English enhance their learners' writing skills to help them engage more in the writing task as well as to increase their confidence and self-esteem. Besides, the researchers recommend the Omani Ministry of Education do more seminars, lectures, and practical courses to help English teachers understand and master the (ILS) method and its activities. Finally, it is recommended that Omani researchers conduct more local research regarding

the significance of applying ECL on students' learning and progression.

## References

- Aladini, A. (2023). Artificial Intelligence (AI) applications to improve EFL university students' academic writing and logical thinking skills. *Educational Sciences journal - Cairo university*. 31 (2). April, 2023.
- Aladini, A.; Alrantisi, M. and Wahdan, M. (2022). Employing Technological Innovations to Develop 9th Graders' English Grammar Skills. *Specialists Ugdyms*. 1 (43). 2022.
- Aladini, A and Jalambo, M. (2021a). Barriers to Employing E-Learning for Primary School Students in the COVID-19 Pandemic from The Teachers' Perspectives, And Ways to Treat Them. *International Journal of Scientific Engineering and Applied Science (IJSEAS)* 7 (11). November 2021. ISSN: 2395 3470.
- Aladini, A. and Jalambo, M. (2021b). Dramatizing the CLIL to promote learners' English-speaking skills and their self-efficacy. (*Universal Journal for Educational Sciences- HORIZON-*). 9 (1), pp. 37 - 52, 2021
- Alastal, M.; Aladini, A.; Jalambo, M. and Alattal, H. (2022). The Impact of Using the Padlet Application on Improving 7th Graders' English Speaking and Deductive Thinking Skills. *European Journal of English Language Teaching*, 7 (2).
- Aldeeb, M. and Aladini, A. (2021) CLIL and drama on conceptual knowledge and logical thinking in mathematics. *Turkish Journal of Computer and Mathematics*. 12 (13). 6897-6910.
- Aladini, A. (2020). A Suggested Program Based on CLIL and Drama and its Effect on Improving 9th Graders' English-Speaking Skills and Their Self-Efficacy. *Unpublished Ph.D. dissertation. IUGaza-Palestine*.
- Aladini, A., Bayat, S. & Abdellatif, M,S (2024). Performance-based assessment in virtual versus non-virtual classes: impacts on academic resilience, motivation, teacher support, and personal best goals. *Asian-Pacific Journal of Second and Foreign Language Education*. Springer Open. 9 (1). <https://link.springer.com/article/10.1186/s40862-023-00230-4>

- Aladini, A.; Shgair, M. and Aladini, E. (2023). ASL impact to improve DHH English Reading comprehension skills. *Multidisciplinary Science Journal, Malque Publishing (volume 5)*. <https://doi.org/10.31893/multiscience.2023055>
- Almashani, H., Kashoob, A. and Aladini, A. (2023). The Impact of Cooperative Learning on Improving Omani Intermediate EFL Learners' Grammar Skills. *Educational Sciences Journal- July 2023–No3–part 2*. DOI: [10.21608/SSJ.2023.318700](https://doi.org/10.21608/SSJ.2023.318700)
- Aladini, A. and Almashali S. (2024) The effect of implementing Project-Based Learning on English Communication Skills among Foundation Program students in Oman. *journal of Education and psychological Research. University of Baghdad*. 82 (21)
- Aghajani, M. and Adloo, M. (2018) The Effect of Online Cooperative Learning on Students' Writing Skills and Attitudes through Telegram Application *International Journal of Instruction, v11 n3 p433-448 Jul 2018*
- Aliyev, A & Ismayilova, K. (2017). Improving English writing skills of non-native undergraduate learners with the help of movies supported by online technologies. *Journal of Education in Black Sea Region, 2(2)*, 1-14.
- Almuslimi, A. K. F. (2016). The effect of cooperative learning strategy on English reading skills of 9<sup>th</sup>-grade students Yameni students and their attitudes towards the strategy. *International Journal of Research in Humanities, 4(2)*, 41-58.
- Al Odwan, T. A. (2012). The effect of the directed reading thinking activity through cooperative learning on English secondary stage students' reading comprehension in Jordan. *International Journal of Humanities and Social Science, 2(16)*, 138-151.
- Alyafaei, Y. and Mudhsh, B. (2023) A review study on the impact of online collaborative learning on EFL students' writing skills. *International journal of linguistics studies*. 3 (3).
- Anggraini, Y., & Radjab, D. (2014). Improving students' writing skills of narrative text through video at grade XII IPA 2 of SMAN 2 Bukittinggi. *English Language Teaching, 2(2)*, p. 78-92.

- 
- Archer, L. (2023). *Intersectional Perspectives in Education*. Oxford University Press.
- Bloom, B. S. (1979). *Human characteristics and school learning*. Ankara: Milli Egitim Publications.
- Bolukbas, F., Keskin, F., & Polat, M. (2011). The effectiveness of cooperative learning in the reading comprehension skills in Turkish as a foreign language. *The Turkish Online Journal of Educational Technology*, 10(4), 330-335.
- Brown, H., & Ciuffetelli, D. C. (2009). *Foundational methods: Understanding teaching and learning*. Toronto: Pearson Education.
- Chang, C. S. (2011). A contrastive study of grammar translation method and communicative approach in teaching English grammar. *English Language Teaching* 4(2), 13-14.
- Cianciolo, P., Henderson, T., Kretzer, S., & Mendes, A. (2001). Promoting collaborative learning strategies in aging and public policy courses. *Journal of Ontology and Geriatrics Education*, 22(2), 47-67.
- Coleman, H. (2011). *Teaching and learning in Pakistan: The Role of Language in Education*. London: Bloomsbury.
- Gaiman, N. (2023). "On Writing." *Lecture presented at the Words and Worlds Conference*, May 2023.
- Gardner, H. (1999). *Frames of mind. The theory of multiple intelligences*. New York: Basic Books.
- Gillies, M. (2004). Teachers' discourse during cooperative learning and their perceptions of this pedagogical practice. University of Queensland, *Journal of Teaching and Teacher Education*, 24(5), 1333-1348.
- Gillies, R. M. (2016). Cooperative learning: Review of research and practice. *Australian Journal of Teacher Education*, 41(3), 39-54.
- Gomleksiz, M. N. (2007). Effectiveness of cooperative learning (jigsaw II) method on teaching English as a foreign language to engineering students (Case of Firat University, Turkey). *European Journal of Engineering Education*, 32(5), 613- 625
- Hattie, J. (2022). *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*. Routledge.

- Iftanti, E. (2016). Improving students' writing skills through writing journal articles. *Journal Bahasa Lingua Scientia*, 8(1), 327-341.
- Johnson, D., & Johnson, R., (1994). *An overview of cooperative learning*, Retrieved October 8, 2008, from <http://www.cooperation.org/pages/html>.
- Johnson, D., Johnson, R., & Stanne, M., (2000). Cooperative learning methods: A meta-analysis", Retrieved October 23, 2008, from <http://www.cooperation.org/pages/CL- methods, HTML>.
- Khan, S. (2008). An experimental study to evaluate the effectiveness of cooperative learning versus traditional learning method. (Unpublished doctoral dissertation). International Islamic University.
- Li, Y. (2023). The effect of online collaborative writing instruction on enhancing writing performance, writing motivation, and writing self-efficacy of Chinese EFL learners. *Front Psychol.* 2023; 14: 1165221. doi: 10.3389/fpsyg.2023.1165221
- Liao, H. C. (2005). Effects of cooperative learning on motivation, learning strategy utilization, and grammar achievement of English language learners in Taiwan. (Unpublished doctoral dissertation), University of New Orleans.
- Liu, D. (2014). Describing and explaining grammar and vocabulary in ELT. New York, NY: Routledge.
- Moryadee, W. (2001). Effects of cooperative learning using student teams-achievement divisions technique on self-efficacy and English learning achievement of Prathomsuksa five students. Unpublished master's thesis, University of Chulalongkorn.
- Ning, H. (2011). Adapting cooperative learning in tertiary ELT. *English Language Teaching Journal*, 65(1), 60-70.
- Prasad, K.; Aladini, A. ; Normurodova, N. and Belton, B. (2023). Take language assessment easy: the mediator impacts of self-assessment, test-taking skills in predicting student evaluation apprehension, foreign language learning self-esteem, and language achievement in online classes. *Language Testing in Asia*. 13, 34 (2023). Scopus indexed. <https://doi.org/10.1186/s40468-023-00246-0>

- Siegel, C. (2005). Implementing a research-based model of cooperative learning. *The Journal of Educational Research*, 98(6), 1-15.
- Slavin, R. E., & Cooper, R. (1999). Improving intergroup relations: Lessons learned from cooperative learning programs. *Journal of Social Issues*, 55(4), 647-663.
- Smith, J. (2023). Cooperative learning: Enhancing student collaboration and individual achievement. *Journal of Educational Psychology*, 38(2), 45-60.
- Soares, L. B., & Wood, K. (2010). A critical literacy perspective for teaching and learning social studies. *The Reading Teacher*, 63(6), 486-494.
- Vaughn, S. (2023). *Cooperative Learning Strategies for Literacy Instruction*. International Literacy Association.
- Wung, Y. and Ju Wu, T. (2022). Effects of Online Cooperative Learning on Students' Problem-Solving Ability and Learning Satisfaction. *Front. Psychol.*, 10 June 2022
- Sec. *Educational Psychology*. 13  
(2) <https://doi.org/10.3389/fpsyg.2022.817968>