



## **ESL Cooperative Learning Activities Using Technology in the UAE**

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### **Introduction**

English is mostly used in different types of communications around the world. This shows the importance of learning this crucial language in schools and other educational institutions. People in multicultural communities come from different cultures and backgrounds, leading to mixed language abilities among students in the classroom. Therefore, traditional teaching methods are no longer effective in teaching multicultural students. Teachers and policymakers realize the importance of innovative methods, including using technology to enhance ESL classes teaching and learning efficacy. Naturally, with the integration of technology in all aspects of our lives, there is an extensive body of research about using technology for educational purposes, especially in language teaching. The English language is taught and used in most American, British, Arabic, and Indian schools. Crucial concepts and terms such as cooperative learning, student-centred classes, and technology integration in classrooms are becoming a critical topic in all UAE schools. This paper focuses on cooperative learning activities using technology in the classroom for school students.

### **Literature Review**

This literature review discusses three types of studies: studies about cooperative learning, studies about teaching with technology, and studies about using technology in cooperative learning.

### **Cooperative Learning**

Cooperative learning has been a popular subject in many studies, especially when it involves language learning. Nair and Sanai (2018) conducted a study to see the effects of using the STAD method, which is one of the cooperative learning approaches on students' writing skills within the field of descriptive writing. The study used a pre-test, a post-test, interviews, reflections and observational checklists to collect data. The findings showed a positive effect of the STAD model in enhancing the students' writing skills, especially the descriptive ones. In contrast, Jou (2017) examined the utilization of cooperative learning and project-based learning in English classes. Through interviews and observations of fourth-year students' graduation projects in Taiwan, the researcher concluded that there were positive outcomes for using the two approaches on the students' level of interaction and academic performance. Gonzales and Torres (2016) also researched Filipino ESL learners; they wanted to check the cooperative model's



effectiveness on grade eight students. Their quasi-experimental analysis explored the students' attitudes towards the use of cooperative learning in their classes. The authors also examined the efficacy of the model by investigating the correlation between using this learning model and the reading test scores. The authors stated that there was a weak link between the scores of the reading test and the model used for cooperative learning activities. However, the students had positive attitudes towards the cooperative learning model in general. The authors mentioned that the implications of their study could be useful to ESL classes worldwide as they were not limited to a particular educational setting.

## **Teaching with Technology**

Nowadays, using technology is crucial in education, either in schools or in any educational institution such as language centres or universities. Using technology in teaching and learning has proven to be effective and essential. Teaching with technology makes the class more exciting and effective for students. It also makes life easier for teachers and facilitates some of their tasks (like auto-correction of assessments). Technology is also responsible for motivation and engagement. However, there are some disadvantages of technology in the classroom. For example, some safety and privacy issues are reported, and it is also easier for students to cheat or have access to information through the Internet and just copy and paste content for their projects. Therefore, teachers have to make sure that their students know how to avoid plagiarism, stay safe online, and warn their students about communicating or sharing personal information with unknown people (Healey, 2018).

Several studies were conducted to examine the effects of teaching with technology or the gamification of classroom activities. In China, Teo, Huang, and Hoi (2018) wanted to know if teachers were able to use technology effectively in class to teach English, and they also wanted to measure the level of acceptance of teachers and students of technology in the classroom. The study's findings indicated positive outcomes for using technology in the classroom. Moreover, Wichadee and Pattanapichet (2018) explored the effect of gamified learning activities in English language classes. The researchers wanted to see if gamification helps in learning the language in a real classroom setting. By dividing the students into a control and experimental group, the researchers concluded that the experimental group had higher marks on the exams, indicating that gamification of the language activities was successful in improving the students' level.

## **Cooperative Learning & Technology**

According to Cobb (2016), the concept of Cooperative learning is not new as it has been used since 1970. The term "has its roots in theories of constructivism and social interdependence theory. When computer and internet technologies are used with cooperative learning for disadvantaged students, educators must also consider learning tools and motivation. Students who receive computer-assisted instruction (CAI) have higher student achievement than students who do not use technology in the classroom." (Cobb, 2016, p. 4). Cobb's (2016) study's results state that utilizing cooperative learning aids students to develop good relationships with their classmates, and this successful interaction is considered more important than other achievements like a high IQ. The results also showed that learners who worked with cooperative learning activities had better performance and self-confidence, and they worked well within a group to reach their learning objectives. Another study by Bodsworth and Goodyear (2017) looked at both the challenges and the facilitators of utilizing technology in class activities. The study's target was to explore the issues that might encounter users when using technology in cooperative learning activities for school students. The findings indicated that there were some challenges to using this model, such as the issues with using technology and the reluctance of some students to work with their peers. However, students were able to learn and reflect in a better way when this model was used. The study's findings also reveal the importance of the instructional designers' role and their ability to integrate technology on solid pedagogical grounds. All in all, the previous literature showed that using technology

in cooperative learning activities can be challenging for some, but it also led to many benefits in the teaching and learning process.

## Theoretical Framework

According to Cobb (2016), cooperative learning has deep roots in the constructivism theory and in the social interdependence theory. Several theories were involved in studies about the same topic, these theories included but were not limited to 1) the students' centred approach initiated by Vygotsky and Piaget, and 2) the social interdependence theory by (Deutsch, 1949, 1962; Johnson & Johnson, 1989, 2005, 2009). The current study utilized the TAM (Technology Acceptance Model) for its theoretical framework. The TAM model is based on Reasoned Action theory, and it is used to explore the level of acceptance of technology among teachers and students in a school setting. The model includes two areas; the perceived usefulness and the perceived ease of use described by (Davis, Bagozzi, & Warshaw, 1989). Figure 1 shows the TAM detailed framework:

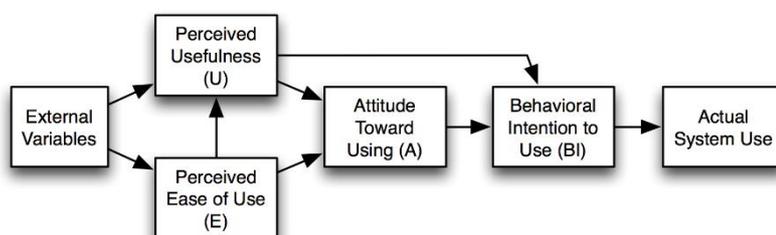


Figure 1. The technology acceptance model, version 1 (Davis, Bagozzi & Warshaw, 1989).

The model demonstrates and describes how users perceive and accept the use of technology. Users want to achieve particular targets when working with a particular technological tool; therefore, they have to create an intention for their behaviours. This intention is impacted by the users' attitude towards technology in general. The model shows that when users are asked to try new technology, their decision can be affected by several factors about the time and the ability to use it. In this report, I focus on the attitudes of two critical stakeholders (teachers and students) in the teaching and learning process and their reactions to using technology in cooperative learning activities according to the TAM model. The study's research question was based on this exploration, and a Likert-scale survey was designed to explore the two described aspects of the model.

## Method

The study was based on two Likert scale surveys to collect quantitative data about students' and teachers' attitudes towards using technology in cooperative learning activities. Before the surveys were distributed to students and teachers, there was a two-week intervention where the researcher gave a list of activities that utilize technology in cooperative learning and that were suitable to the students' level. The activities were given to the participating teachers to use in their classes for two weeks. Surveys were chosen as the primary method of data collection for this research as they are considered good instruments to explore attitudes and perceptions according to Joshi et al. (2015). The study was conducted in the UAE, in a private American school. The study's sample population was a purposive sample as students from grade eleven were selected to participate in the study. The sample of students was 269, while the number of participating teachers was eleven. All participants were told about the study's objective, and they were

also told that their participation was voluntary and that they could withdraw from the study at any time. After obtaining the required permissions, the intervention took place for two weeks; then the data was collected and analyzed.

## Results

### Teachers' Surveys

The sample of teachers included eleven English teachers who work in the high school section of the school. The Likert-scale response categories were SD=Strongly Disagree, D=Disagree, NAD=Neither Agree or Disagree, A=Agree, D=Disagree, and SA=Strongly Agree.

The first part of the teachers' survey results shows the perceived usefulness of the technology used in cooperative learning activities. Most teachers agreed (36%) or strongly agreed (45%) that being familiar with the school learning management system helped their students to improve their writing, (27%) of the teachers agreed and (55%) strongly agreed that using technology was effective and facilitated students' language learning especially their writing skills. For cooperative learning activities, (27%) of the teachers agreed and (36%) strongly agreed that using technology increased the efficacy of students' learning and made them work harder. Out of the teachers' sample (18%) agreed and (45%) strongly agreed that the technological tools used in cooperative learning activities improved their students' writing knowledge. Another (18%) of the teachers agreed and (27%) strongly agreed that using technology in cooperative learning activities made their students interact better with their peers. The results reveal a general trend of positivity towards cooperative learning activities and integrating technology into them from the pedagogical point of view.

For the results of the second part of the teachers' survey, which refers to the perceived ease of use, most teachers agreed (36%) or strongly agreed (36%) that it was easy for them to use the school's learning management system in doing the cooperative learning activities. Also, (18%) agreed and (64%) strongly agreed that it was easy for them to learn how to use collaborative platforms to work with cooperative learning activities. Most teachers (18%) agreed and (55%) strongly agreed that using the different technological tools in designing cooperative learning activities was easy for them. For using the Internet and the different websites or troubleshooting simple technical issues, (18%) of the teachers agreed and (36%) strongly agreed that these tasks were easy for them. Finally, (27%) of the teachers agreed and (36%) strongly agreed that it was easy to communicate with their students when doing cooperative learning activities. This part's overall results indicate that most teachers found the technology easy to use, especially in cooperative learning activities.

### Students' Surveys

The sample of students included 269 students in high school. The Likert-scale response categories were SD = Strongly Disagree, D = Disagree, NAD = Neither Agree or Disagree, A = Agree, D = Disagree, and SA = Strongly Agree.

The first part of the students' survey reveals the perceived usefulness of the technology used in cooperative learning activities. Most students agreed (7%) or strongly agreed (74%) that being familiar with the school learning management system helped them to improve their writing and (21%) of the students agreed and (58%) strongly agreed that using technology was effective and facilitated students' language learning especially the writing skills. For the survey item about using technology in cooperative learning activities, (21%) agreed and (58%) strongly agreed that using technology increased the efficacy of their learning and made them work harder. Furthermore, (25%) of the students agreed and (52%) strongly agreed that the technological tools used in cooperative learning activities added to their writing skills. Another (29%) agreed and (30%) strongly agreed that using technology in the cooperative learning

activities led to better interaction with their classmates. The results reflect a positive attitude towards the perceived usefulness of the pedagogical use of technology in cooperative learning activities.

The second part of the students' survey refers to the perceived ease of use. Most students agreed (22%) or strongly agreed (37%) that it was easy for them to use the school's learning management system to do cooperative learning activities with their classmates. Also, (25%) of the students agreed and (29%) strongly agreed that it was easy for them to learn how to use collaborative platforms to work with cooperative learning activities. Moreover, (24%) of the students agreed and (31%) strongly agreed that using cooperative learning activities facilitated learning the English language for them, while (24%) agreed and (34%) strongly agreed that using the different technological tools in cooperative learning activities was easy for them. Students also reported that they had no issues in troubleshooting simple technical problems or in using the Internet. Also, some (20%) of the students agreed, and (30%) strongly agreed that these tasks were easy for them. Out of the sample, (26%) of the students agreed and (37%) strongly agreed that it was easy to communicate with their students when doing cooperative learning activities. This part's overall results indicate that most teachers found that technology was easy to use in cooperative learning activities. The results of the students' survey reveal feelings of positivity towards the perceived ease of the use of technological tools from the logistical point of view. However, the numbers of part two seem to be lower than part one, reflecting that although students perceived the technology as useful, some had difficulty using it. To sum up, both teachers and students' survey results reflect a positive trend towards the usefulness and the ease of using technological tools in cooperative learning activities.

## Discussion

A critical finding of the current study is that teachers' previous knowledge contributed to their success in using technology in the classroom and made new tools more accessible for them. This finding agrees with the findings of Wilson, Ritzhaupt and Cheng (2020) who stated that the previous knowledge of teachers could be very important for them to build their technical knowledge on this basis. The second important finding of the current study is that teachers praised the cooperative learning activities as they believed they contributed to their students' improvement in writing classes. This finding is in line with Nair and Sanai's (2018) findings, who mentioned that using cooperative learning helped improve the students' descriptive writing skills. The third important finding of this study is that technology use in cooperative learning activities was perceived by teachers as helpful and useful, and this finding is also in line with the findings of Johnson and Johnson (2014). They stated that using technology in cooperative learning activities creates a very efficient learning experience and helps students improve their writing. According to Johnson and Johnson (2014, p.4) "Technology can facilitate learning how to write, improving the quality of one's writing, and working together in producing one document authored by the whole group."

A high percentage of teachers mentioned that students worked even harder when they joined cooperative learning activities, and this agrees with the finding of Nichols and Miller (1994). They mentioned that students who indulged in this type of activity improved their orientation towards their learning goals. The teachers also mentioned that the students interacted better with their classmates, which is a similar finding to that of Awada and Gutiérrez-Colón (2019) who concluded that cooperative learning activities contributed to the improvement of communication between students and their peers. The fourth significant finding of this study is that using technology in cooperative learning activities improved the students efficacy levels, and this finding is similar to the findings of Yun and Park (2012) who examined the use of cooperative learning activities in the enhancement of students' English proficiency and self-efficacy and concluded that these types of cooperative activities helped improve the language and the efficacy skills.

Looking at students' attitudes, it was found that students mostly had positive attitudes towards using technology in cooperative learning activities, and this finding is similar to the findings of Aghajani and Adloo (2018), who stated that online cooperative learning had a significant effect on the students' writing level and their attitudes when they used online applications such as Telegram. The last significant finding of the current study is that students believed that cooperative learning activities using technology motivated them to exert more effort in the given task. This finding is in line with Tran's (2019) findings who examined the impact of cooperative learning activities as well as lecturing to students and discovered that this type of activity had a positive impact on the students' motivation and ability to do more. The same also applied to Gerald and Allan (2018) findings which stated that students showed positive attitudes toward cooperative learning activities and that their performance improved.

## Conclusion

The current study's general findings show the usefulness and ease of using technology in cooperative learning activities. The findings also reflect both students and teachers' positive attitudes towards using technology in cooperative learning activities. In English classes, it can be very useful and helpful to employ technology in cooperative activities to improve the students' language learning abilities. It was also evident that previous students' and teachers' knowledge of technology can help a lot when introducing new activities. This shows that we, as educators, should engage in more training in the area of technology and link it to our known pedagogy. Although some teachers and students found it difficult to interact with technology at times, knowing how to troubleshoot simple technical issues can be a time-saver; therefore, professional training for both teachers and students in this area is also required and should be encouraged.

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