The Effects of Using Educational Mapping as a Game in Teaching English Language on the Learning and Teaching Process

BY

Dr.Saddam Kobari[1*], Prof.Mohamed Shaheen[2]

[1]Assistant Professor-Faculty of Graduate Studies and Scientific Research, Al-Quds Open University, Ramallah, Palestine.
[2]Professor-Dean-Faculty of Graduate Studies and Scientific Research, Al-Quds Open University, Ramallah, Palestine.

Abstract

The current study aims to explore how the learning and teaching process is affected when educational mapping is used as a game in English language instruction. The study involved 27 Al-Quds Open University master's degree candidates. The research questions were: 1. Does using educational mapping as a game in teaching the English language affect the process of learning and teaching? 2. How does using educational mapping as a game in teaching the English language affect the process of learning and teaching? To answer the research questions, the researchers collected 27 forms of semi-structured written interviews. Moreover, the study's thematic coding and Gioia approach serve to illustrate how the researchers applied the qualitative methodology. The results of the study stated that using educational mapping in teaching English had positive effects on the cognitive, psychological, social and emotional domains of the learning and teaching process. Therefore, the researchers recommended using educational mapping in teaching English to create an optimal positive learning and teaching atmosphere, and positively affect the learning and teaching process.

Keywords: Educational Mapping, English Language, University Students, Learning and Teaching.

INTRODUCTION

Graphic organizers are pivotal in improving students' comprehension, recalling information, and language acquisition. Graphic organizers can develop students' performance; hence, it is recommended to frequently use them in teaching and learning (Gajria et al., 2007). Fisher (2001) stated that graphic organizers are useful aids that help readers grasp written texts easily. They improve cognitive abilities and critical thinking skills. In addition, graphic learners help learners to concentrate. Ausubel (1963) demonstrated that using graphic organizers makes the process of learning interactive, meaningful, and easy; it helps students to be independent learners. Besides, using graphic organizers makes learning effective, enjoyable, and motivating, particularly for learners who have special needs (Dexter & Hughes, 2011).

Scruggs et al. (2008) indicated that using graphic organizers improves students' achievement and performance. In addition, using graphic organizers can develop understanding, memorization, and recalling skills. They assist learners in discovering connections, summarizing lessons, and answering questions. Tisleston (2004) stated that using graphic organizers helps students to summarize lessons and arrange their thoughts successfully. They also affect their performance and motivation positively. Ermis (2008) found that using graphic organizers assists students while reading different passages since they simplify the content by connecting various concepts. Using them properly reduces the obstacles and hardships that learners may face while they learn.

Games

Ibrahim & Abu Hmaid (2017) concluded that using interactive video games in teaching mathematics positively affected students' achievement. Besides, Kamnardsiri et al. (2017) found that using game-based learning in teaching American Sign Language positively affected students' achievement. Furthermore, Kuzu (2020) concluded that using mind games and intelligence in teaching writing positively affected students' achievement and abilities. Kobari et al. (2022) indicated that using games in

teaching positively influenced students' motivation and achievement.

Scaffolding

Offering scaffolds is shown as providing helping activities, which have several benefits. First, scaffolds motivate learners' enthusiasm and interest in a particular task. Second, they ease the difficulty of the task. Third, scaffolds provide guidelines and directions to learners to accomplish the given goals effectively and successfully. Fourth, they minimize the hardships that learners might encounter while learning. Fifth and last, they offer expectations and guidelines for activities to work on (Bransford et al., 2000). In addition, Mckenzie (2000) stated that scaffolding has several benefits. First, it provides effective help and minimizes student's confusion and perplexity. Second, it demonstrates the pedagogical objectives. Hence, learners will be aware of what they are doing and what they are expected to do. Third, it increases learners' attention and concentration. It assists students to give more attention to the given tasks. Fourth, it offers real expectations and links evaluation with effective guidance. Fifth, scaffolding directs students to beneficial facilitations; thus, students cannot be confused or perplexed. Last, it decreases learners' confusion and uncertainty; therefore, it promotes active learning easily.

Vygotsky (1988) explained that effective and deep learning is founded on social communication among various students with various attitudes and abilities. That is, it entails helping the student to make progress and move into next the levels of knowledge and understanding. Besides, Vygotsky stated that language is considered a vital scaffolding tool that helps to achieve the required missions easily. In addition, Daniels (2001) stated that instructors and educators use scaffolding to ease the process of achieving educational goals appropriately

Educational Mapping

Mapping was introduced in the late 60s by the British psychologist Tony Buzan as a trial to aid his learners in taking notes easily. According to Buzan, mapping is a connected network of words, shapes, and images that convey specific ideas (Buzan & Buzan, 1996). Summers (1997) found that the formation of educational mapping simplifies understanding and focusing on the main ideas. It also activates the two hemispheres of the brain to work effectively; hence, it improves their performance and confidence. Furthermore, Grabe (2009) found that using educational mapping is an effective teaching strategy that can increase students' motivation and curiosity by activating them to pay attention and participate while learning. In addition, educational mapping helps students to compare and contrast different concepts. It also assists learners to get deep and meaningful understanding easily (Strangman et al., 2003). Educational mapping helps learners memorize words and phrases easily. It also increases their motivation to learn languages since it can help them recall and retrieve words when needed (Hofland, 2007).

Educational Mapping Game

One type of graphic organizer is educational mapping; using educational mapping in teaching has many benefits, and using games in teaching has lots of advantages; hence, the researcher attempted to convert educational mapping into a game to increase its benefits. Numerous studies have discussed the benefits of using educational mapping as a game to teach English. For example, Kobari (2018) found that using educational mapping as a game in teaching reading comprehension positively influenced 11th-grade students' achievement and attitudes. In addition, Kobari et al.(2023a) indicated that using educational mapping as a game in teaching the English language could increase university students' motivation. Besides, Kobari et al.(2023b) indicated that using educational mapping in teaching the English language could increase university students' self-efficacy. Furthermore, Kobari et al.(2023c) stressed the significance of adopting the proposed technological future model of using educational mapping as a game in teaching English. In addition, Kobari and Shaheen (2023a) stated that using educational mapping as a game in teaching English could develop students' speaking cognitive and psychological domains. Moreover, Kobari and Shaheen (2023b) stated that using educational mapping as a game in teaching English could develop students' writing cognitive and psychological domains. However, the current study was conducted to discover the impact of using educational mapping as a game in teaching English language on the learning and teaching process. Hence, the current study aims to address two research questions: 1. Does using educational mapping as a game in teaching English language affect the learning and teaching process? 2. How does using educational mapping as a game in teaching English language affect the learning and teaching process?

Methodology

Al-Quds Open University master's degree students represented the study's population. Around 800 students are enrolled in the master's programs at Al-Quds Open University in 2022–2023. 27 students represented the sample of the students, who were chosen at random using stratified random sampling.

Training program

The pre-intermediate English language textbook, which is provided at numerous regional universities in Palestine, served as the source material for the slides of the educational mapping. The Erasmus program of the European Union also contributed to the creation of the book design project, and data from the book was used to create the mapping slides. In addition, there are four sections on the mapping slides: writing, grammar, vocabulary, and reading comprehension. The training program required eight lectures to be delivered. A 180-minute lecture was given to the students each week. The participants attended all of the researcher's lectures. Additionally, certain lectures were given for conducting the midterm and final exams.

Lecture	Content	Lessons
1st lecture (Units one and two)	Grammar	Sentences, Questions Transitive and intransitive verbs Regular and irregular verbs Present Simple and Wh-Questions
2nd lecture (Units three and four)	Grammar	Past Simple Passive voice(Present simple and past simple) Imperative
3rd lecture (Units five and Six)	Grammar	Present progressive, present perfect Comparative adjectives Superlative adjectives
4th lecture (Units one and two)	Reading comprehension and vocabulary	Greetings from around the world, Netiquette Food and Health , what is in your food? Cuisines and Countries, get healthy
5th lecture (Units three and four)	Reading comprehension and vocabulary	Wonders of the world, Jerusalem and Bethlehem full day tour, biomes Fashion ….are you interested? Palestinian Traditional customs: The story of place and memory
6th lecture (Units five and Six)	Reading comprehension and vocabulary	Learning and Technology A new Era of Entertainment Technology Palestine got home E-sports
7th lecture (Units one, two and three)	Writing Topics	Capitalization Commas Application and assessment
8th lecture (Units four, five and six)	Writing Topics	Giving Reasons (Because and so) Contrasting (But) Application and assessment

Figure 1: Training program- lectures

Samples of Educational Mapping Game
The following slides represent a sample of educational mapping game.

Learning and Technology

In the twenty-first century, it has been said that a person cannot learn or teach without "tech". Yet, classroom environment has changed widely. Moreover, technology changed teaching methods to let learners grow into experts in different contexts and for various audiences. Therefore, because of the Internet, the world is no longer a different place.

Technology plays such a significant role in our lives today, that it is difficult to ignore. There are so many applications to help people work, commute, communicate, and study easily, such as the Moodle application. The term "MOODLE" stands for Modular Object-Oriented Dynamic Learning Environment.

It is an online educational application that has been used for years at most Palestinian universities. Teachers usually use Moodle to create lessons, manage courses, and interact effectively with teachers and students.

In 2020, during the difficult times caused by the COVID-19 pandemic, most Palestinian universities have depended heavily on technology and used Moodle as one of the means of communicating with students.

Finally, it is so obvious that technology is important in our lives, and ignoring it means a significant disconnection between learning inside the classroom and learning outside the classroom.

Figure 2: The Reading Text

The lesson talks about _____

1) The text mentions different phrases that are related to learning and technology such as _____   _____ and _____

2) What does technology do?

3) How does it help people?

4) What is the full name of Moodle?

5) Whom does Moodle help?

6) How does Moodle help Palestinian university teachers?
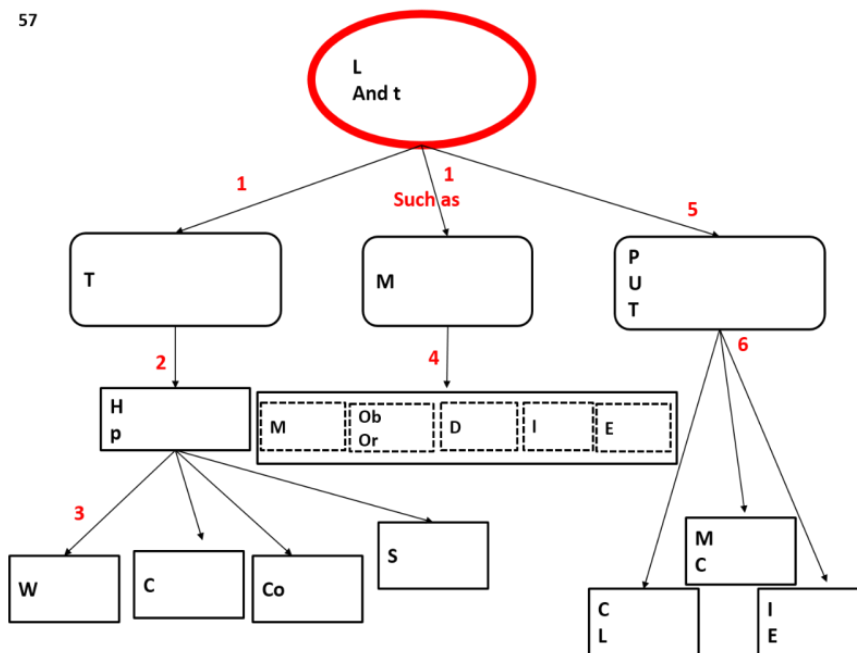
Figure 3: Questions on the Reading Text

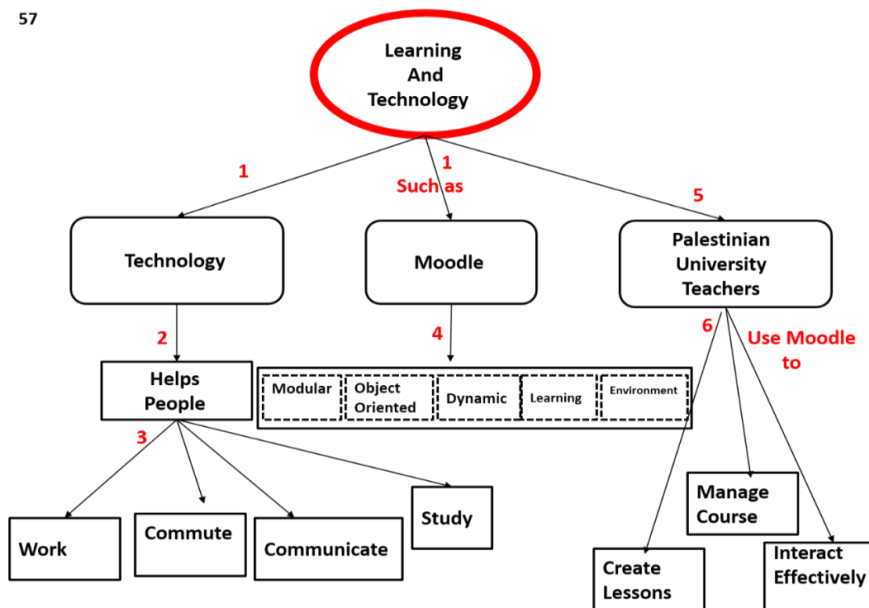**Figure 4: Using Educational Mapping as a Game**

Figure 5: Sample Answer of the Educational Mapping

Study procedures

A researcher taught the 27 students utilizing educational mapping as a game after choosing the study's sample. In the second semester of 2022/2023, the study was carried out. The intervention period, which occurred from 15 February 2023 to 15 May 2023, covered about three months during which they received instruction. Then, the participants were given a written interview paper that worked as a reflection form and contained semi-structured questions that were specific to the study questions.

Data Collection Tools

The data was collected using a semi-structured interview form that included written questions associated with the study's questions (Maxwell, 2013). To give thorough responses to the questions, participants had 24 hours to answer the given questions. Thematic coding was used to further explain the themes after the researchers coded the data using the participants' responses.

Data Analysis Tools

According to Dacin et al. (2010), the Gioia approach is appropriate for the current study since its findings feature both major and minor themes that are interlinked together. For instance, the main theme was cognitive effects; it was divided into the following second-order themes: improving reading comprehension skills, improving speaking skills, and improving writing skills. The second basic theme was psychological effects. It was categorized into two minor themes: increasing students' motivation and increasing students' confidence.

Dacin et al. (2010) marked the significance of utilizing snippets when creating themes, sub-themes, and codes. For example, to enrich the themes of the research, we extracted various quotations. We stressed the sub-theme "liking the method and the lecture" which is taken from the emotional effects theme with the quotation: *"I liked this great method which helped to learn English easily, I wait for the amazing English lecture from week to week to participate by using this method."*

Validity and Reliability

The themes and sub-themes were debated before the final themes were approved by the researchers to ensure the study's validity and reliability. Each researcher worked individually, coded the responses for the semi-structured interview forms, and made sure the data analysis was accurate and trustworthy. After that, a researcher and two other investigators examined 10% of the recorded written interview forms. The initial inter-rater reliability for the coders was 85.71%, and the final inter-rater reliability for the coders was 92.85%; the final inter-rater reliability was estimated after the researchers discussed and concurred on the coded data.

Ethics

Al-Quds Open University's Faculty of Graduate Studies and Scientific Research granted permission for the researcher to conduct this study. Before collecting the needed data, the participants' consent has been fully obtained.

Results

The results of the study explored that using educational mapping in teaching English had positive effects on the cognitive, psychological, social, and emotional domains of the learning and teaching process.

1. Cognitive effects

The results of the current study demonstrated that the cognitive domain was affected by improving reading comprehension skills, improving speaking skills, and improving writing skills.

1.1 Improving reading comprehension skills

Many students stated that using this method improved their reading comprehension skills. For instance, a student (A.M) wrote: "Using this method helped me to understand the reading passage easily, I can read and understand the lesson without difficulties". In addition, a student (M.S) wrote: "This great method improved my reading comprehension skills in a short time, thank you doctor for this amazing and new way."

1.2 Improving speaking skills

Several students wrote that using educational mapping as a game could improve their speaking skills. For example, a student (S.A.S) wrote:" Using educational mapping method helped me to improve my speaking skills, it improved the way which I speak as well as developing the style of speaking". Another student (A.O.A) wrote:" This method improved my conversation skills in a short period, I became able to speak, reflect, and summarize the lecture orally."

1.3 Improving writing skills

A lot of students stressed that using this method could improve their writing skills. For instance, a student (D.K) wrote:" Before taking this course, I wasn't able to write a sentence, but after that, I became able to write sentences and paragraphs. This method amazingly developed my writing skills". Another student (D.K) wrote:" Using educational mapping as a game helped me a lot in writing, and it helped me write and express my ideas in a written way."

2. Psychological effects

The results of the current study demonstrated that the cognitive domain was affected by increasing students' motivation and increasing students' confidence.

2.1 Increasing students' motivation

Many students stated that using this method could increase their motivation. For instance, a student (M.S) wrote:" This method increased my motivation clearly to participate and play my role in the lecture effectively; it encouraged me to participate and produce knowledge". Another student (S.A.) wrote:" Using educational mapping aroused my motivation to learn through the educational maps and puzzles."

2.2 Increasing students' confidence

Several students stated that using an educational mapping game could increase their confidence. For example, a student(Kh. Sh)

wrote:" This amazing method increased my confidence to write, speak and communicate in English, and I became confident in my abilities and skill of the English language". Another student (H.K) wrote:"Using this method to learn the English language was amazing because it gave me the courage and trust to answer questions and participate all the time".

3. Social effects

The results of the current study demonstrated that the social domain was affected by cooperating and interacting with other students and discussing topics with the lecturer and students.

3.1 Cooperating and interacting with other students

Lots of students wrote that using the educational mapping method helped them to cooperate and interact with other students. For instance, a student (A.Z) wrote:" This method helped me to cooperate with other students to guess the missing letters and participate". Another student (J.A.S) wrote:" This method increased the harmony and interactions among the lecturer, me, and my colleagues."

3.2 Discussing topics with the lecturer and students

Several students stated that using this method could help them in discussing topics with the lecturer and students. For instance, a student (B.I) wrote:" Using this method increased the cooperation with my colleagues to discuss topics with the lecturer and produce new ideas and thoughts". Another student (I.A.) wrote: "Using this method helped me to collaborate with my colleagues and the lecturer to discuss different topics and generate many ideas together."

4. Emotional effects

The results of the current study demonstrated that the emotional domain was affected by liking the method and the lecture,

preferring the method over other traditional methods, and recommending using the method in teaching other subjects.

4.1 Liking the method and the lecture

Many students stated that they liked educational mapping as a game method and the lecture. For instance, a student (A.B) wrote: "I enjoy learning using this amazing method, so I like the English language lecture since I can speak and participate with correct answers". Another student (A.H) wrote:" This method made me interested in the lecture and I liked it so much …this method gave me the power to feel that I active during the lecture."

4.2 Preferring the method over other traditional methods

Several students wrote that they think using this method in teaching English is better than other teaching methods. For example, a student (A.G) wrote: "This method in teaching was effective, enjoyable and suitable for all students, so we think it better than other conventional teaching methods". Another student (A.W.G) wrote:" The method was simple and easy because it made us feel comfortable more than other traditional teaching methods. Using it gave the chance to all students to participate and think to find the correct answers."

4.3 Recommending using the method in teaching other subjects

Lots of students wrote and recommended using this method in teaching other subjects. For example, a student (A.S.A) wrote:" I liked this method a lot, so I use it to teach my students mathematics". Another student (A.B) wrote:" I liked this enjoyable, simple, and easy method that helped me brainstorm my knowledge in contrast to the previous teaching methods I saw in my life; I recommend other lecturers and professors to use it in teaching."
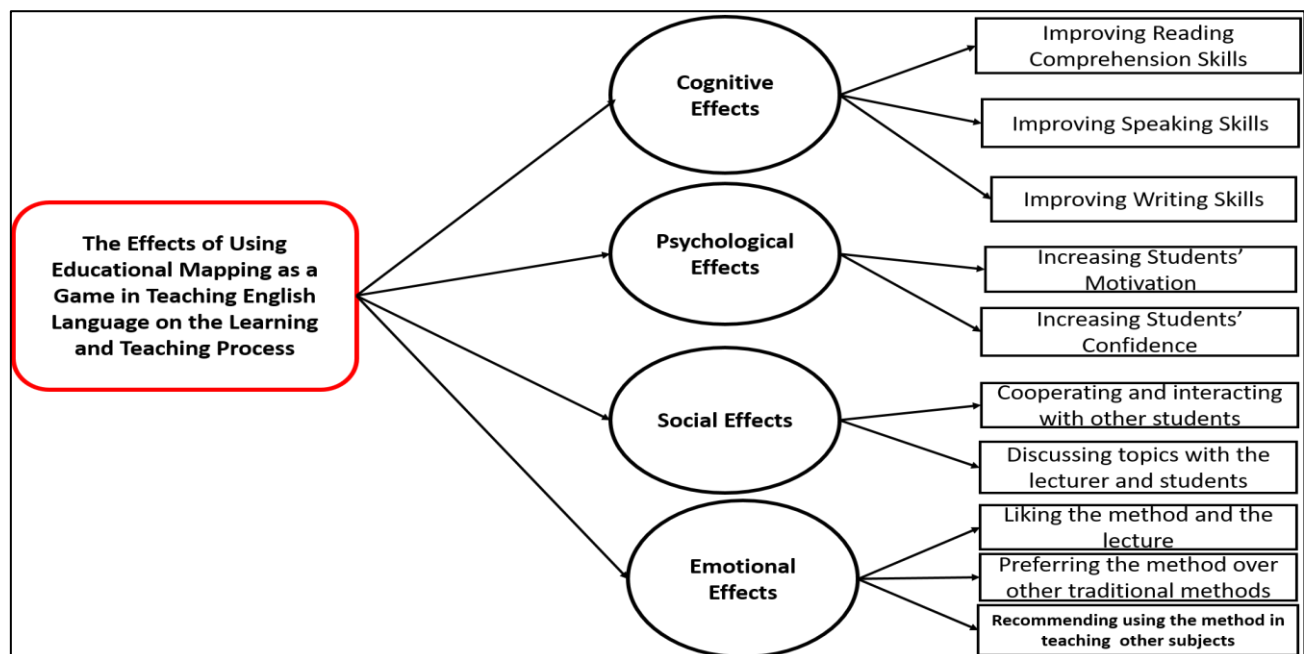

Figure 6: A diagram that shows the results of the study

Discussion

The results of the study stated that using educational mapping in teaching the English language had positive effects on the cognitive, psychological, social, and emotional domains of the learning and teaching process. It showed that the cognitive domain was affected by improving reading comprehension skills, improving speaking skills, and improving writing skills. In addition, it stated that the cognitive domain was affected by increasing students' motivation and increasing students' confidence. Moreover, it indicated that the social domain was affected by cooperating and interacting with other students and discussing topics with the lecturer and students. Furthermore, it elaborated that the emotional domain was affected by liking the method and the lecture, preferring the method over other traditional methods, and recommending using the method in teaching other subjects.

The findings of this study confirmed the findings of many studies. First, Scruggs et al. (2008) indicated that using graphic organizers improves students' achievement and performance. In addition, using graphic organizers can develop understanding, memorization, and recalling skills. They assist learners in discovering connections, summarizing lessons, and answering questions. Second, Tisleston (2004) stated that using graphic organizers helps students summarize lessons and arrange their thoughts successfully. They also affect their performance and motivation positively. Third, Ermis (2008) found that using graphic organizers assists students while reading different passages since they simplify the content by connecting various concepts.

The researchers think that the students preferred using educational mapping as a game in learning English for a variety of potential reasons. First of all, it was first introduced as an interactive and engaging game rather than the conventional methods of learning and teaching; in other words, games have an effective positive impact on students because using games attracts students to participate and play their roles easily. Using games while learning and teaching fosters an engaging environment that makes it easier for students to act out their roles. Moreover, the students paid great attention to both the main and minor ideas when they were drawn to this method. Because educational mapping as a game is based on the scaffolding strategy, the students were given the flexibility and trust to participate since the initial letter of the answer was displayed.

The findings of the current study came in line with lots of studies. First of all, Summers (1997) found that the formation of mapping simplifies understanding and focusing on the main ideas. It also activates the two hemispheres of the brain to work effectively; hence, it improves their performance and confidence. Furthermore, Grabe (2009) found that using educational mapping is an effective teaching strategy that can increase students' motivation and curiosity by activating them to pay attention and participate while learning. In addition, Strangman et al. (2003) indicated that educational mapping helps students to compare and contrast different concepts. It also assists learners to get deep and meaningful understanding easily. Besides, Hofland (2007) stated that educational mapping helps learners to memorize words and phrases easily. It also increases their motivation to learn languages since it can help them to recall and retrieve words when needed.

The researchers think that as the students were trying to answer questions and express their ideas, their skills and capacities progressively improved. In other words, when the students relied on themselves while learning, they got over their learning anxieties and challenges. Playing out their roles encouraged learners' independence and trust. Thus, the students believed they could contribute a significant part to the lecture and that they were not being ignored. That is, the students had the opportunity to practice applying the language as they interacted with others in English, and they could feel better about themselves. Because they are active participants, students preferred this method to other traditional ones. The students discovered that applying it to the process of learning English helped them pick up new words and expressions. Of course, it was also very beneficial to the students in comprehending the content of the lecture. Thus, they felt more confident answering the questions. Using the educational mapping method helped the students while learning English to identify the key ideas of the lecture and lessons. The students also discovered using educational mapping as a game helped them to use their vocabulary; using it to study English gave them the confidence and motivation to present the lesson in front of their peers. Hence, it inspired them to take part in class debates and discussions.

Consequently, the researchers think, it also increased their enthusiasm to accomplish the tasks of every lecture. Hence, they were inspired to speak and write in English without fear since the students found it helpful to summarize the lesson. Thus, using this method in learning made the process of learning more entertaining, enjoyable, productive, and interactive. As a result, the students wanted their lecturer to use it throughout the rest of the academic year and in teaching them other courses. The students hoped that other lecturers would incorporate it into teaching other courses.

Conclusion

The researchers recommended using educational mapping in teaching English to create an optimal positive learning and teaching atmosphere, and positively affect the learning and teaching process. The results of the study stated that using educational mapping in teaching the English language had positive effects on the cognitive, psychological, social, and emotional domains of the learning and teaching process. Using this method in learning made the process of learning more entertaining, enjoyable, productive, and interactive. Hence, the students wanted their lecturer to use it throughout the rest of the academic year. Moreover, the students hoped that other lecturers would incorporate it into the teaching of other courses.

Limitations

There were some limitations in this study. Regarding the topic limitations, the study explored how using educational mapping in teaching English affected the teaching and learning process. Regarding the time and place limitations, the study was carried out at Al-Quds Open University during the second semester of the academic year 2022–2023. Last, in terms of methodological limitations, the researchers used thematic coding, and the Gioia

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approach, which represent the qualitative methodology, to analyze the taken data.

References

1. Ausubel, D. P. (1963). The psychology of meaningful verbal learning. New York: Grune & Stratton. https://psycnet.apa.org/record/1964-10399-000

2. Buzan, T. & Buzan, B. (1996). *The Mind Map Book: How to Use Radiant Thinking to Maximize Your Brain's Untapped Potential. Plume.*

3. Bransford, J., Brown, A., & Cocking, R. (2000). *How People Learn: Brain, Mind, and Experience & School.* Washington, DC: National Academy Press. http://www.csun.edu/~SB4310/How%20People%20Learn.pdf

4. Daniels, H. (2001). *Vygotsky and Pedagogy.* NY: Routledge/Falmer.

5. Dexter, D. D., & Hughes, C. A. (2011). Graphic organizers and students with learning disabilities: a meta-analysis. *Learning Disability Quarterly, 34*(1), 51-72. https://doi.org/10.1177/073194871103400104

6. Ermis, S. (2008). Using graphic organizers to facilitate elementary students' comprehension of informational text. *College Reading Association Yearbook*, *29*(1), 87-102. https://files.eric.ed.gov/fulltext/ED512605.pdf#page=101

7. Fisher, A. L. (2001). Implementing graphic organizer notebooks: The art and science of teaching content. *Reading Teacher*, *55*(2), 116-120.https://www.jstor.org/stable/20205022

8. Gajria, M., Jitendra, A. K., Sood, S., & Sacks, G. (2007). Improving comprehension of expository text in students with LD: A research synthesis. *Journal of learning disabilities*, *40*(3), 210-225. https://doi.org/10.1177/00222194070400030301

9. Grabe, W., & Stoller, F. L.(2002). Teaching and Researching Reading. *Applied Linguistic in Action Series*, 3-31. http://Book-Review-Teaching-and-Researching-Reading-Third-Edition-by-William-Grabe-and-Fredricka-L-Stoller-2020.pdf (researchgate.net)

10. Hofland, C. (2007). Mind-mapping in the EFL classroom. *Fontys Teacher Training College Sittard*. http://hbokennisbank.uvt.nl/cgi/fontys/show.cgi?fid=4166.

11. Ibrahim, B. & Abu Hmaid, Y. (2017). The Effect of Teaching Mathematics Using Interactive Video Games on the Fifth Grade Students' Achievement. *An - Najah Univ. J. Res.* (Humanities),*31*(*3*),2017.https://journals.najah.edu/media/journals/full_texts/6_2QrzmhY.pdf

12. Kamnardsiri, T., Hongsit, L. O., Khuwuthyakorn, P., & Wongta, N. (2017). The effectiveness of the game-based learning system for the improvement of American Sign Language using Kinect. *Electronic Journal of E-Learning*, 15(*4*), 283–296. https://files.eric.ed.gov/fulltext/EJ1154946.pdf

13. Kobari, S. (2018). *The Impact of Using Mapping as a Game in Teaching Reading Comprehension on 11th-Grade Students' Achievement and Attitudes.* [Unpublished Master's thesis], Birzeit University.

14. Kobari, S., Shaheen, M.&Mahamid, F.(2023b). The effect of using educational mapping as a game in teaching English language on university students' self-efficacy. *Journal of Arts, Humanities and Social Sciences,5*(1),270-275. https:ISRGJAHSS1812023FTR.pdf (isrgpublishers.com)

15. Kobari, S., Shaheen, M.&Mahamid, F.(2023c). The Suggested Technological Future Model of Using Educational Mapping Based on New Trends in Technology. *Journal of Arts, Humanities and Social Sciences,5*(1),303-311.https://doi.org/10.5281/zenodo.8415879

16. Kobari, S., Shaheen.M.(2023a). The effect of using educational mapping as a game in teaching English language on university students' speaking skills. *Journal of Arts, Humanities and Social Sciences,5*(1),369-372. https://doi.org/10.5281/zenodo.10017249

17. Kobari, S., Shaheen.M.(2023b). The effect of using educational mapping as a game in teaching English language on university students' writing skills. *Journal of Emerging Technologies and Innovative Research,10*(10),347-355. https://www.jetir.org/papers/JETIR2310541.pdf

18. Kobari, S.R., Mahamid, F. & Shaheen, M. (2023a). The effect of using educational mapping as a game in teaching English language on university students' motivation. *Journal of Culture and Values in Education*, *6*(2), 51-65.https://doi.org/10.46303/jcve.2023.8

19. Kobari, S.R., Shayeb, S.J., Dawood, I.K. (2022). The Effect of Using Games in Teaching on Students' Achievement and Motivation. In: Burgos, D., Affouneh, S. (eds) Radical Solutions in Palestinian Higher Education. Lecture Notes in Educational Technology. Springer, Singapore. https://doi.org/10.1007/978-981-19-0101-0_3

20. Kuzu, T. S. (2020). The Effect of Intelligence and Mind Games on Secondary School Students' Writing Success Cansu DURNA. *TOJET: The Turkish Online Journal of Educational Technology*, 19(*3*), 70–79. https://dergipark.org.tr/en/download/article-file/973025.

21. McKenzie, J. (2000). Scaffolding for Success. [Electronic version] *Beyond Technology, Questioning, Research, and the Information Literate School Community*. http://fno.org/dec99/scaffold.html

22. Scruggs, T. E., Mastropieri, M. A., & Okolo, C. M. (2008). Science and social studies for students with disabilities. *Focus on Exceptional Children*, *41*(2), 1-24. https://pdfs.semanticscholar.org/b967/3481b81cf054f3cedcf365388a0d39730508.pdf

23. Strangman, N., Hall, T., & Meyer, A. (2003). Graphic organizers and implications for universal design for learning: Curriculum enhancement report. *National*

Center on Accessing the General Curriculum, 1-32. https://ncac-graphic-organizers-udl-2014-10.docx (live.com)

24. Summers, E. G. (1977). Instruments for assessing reading attitudes: A review of research and bibliography. *Journal of Reading Behavior*, *9*(2), 137-165. https://doi.org/10.1080/10862967709547215

25. Tileston, D.W. (2004). *What every teacher should know about instructional planning*. Thousand Oaks, CA: Corwin Press, Inc.

26. Vygotsky, L.S. (1988) *Mind in Society: The Development of Higher Psychological Processes.* Cambridge, MA: Harvard University Press. https://Mind in Society: Development of Higher Psychological Processes - L. S. Vygotsky, Michael Cole - Google