



The opinions of ELT students on technology-based classroom approach

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ABSTRACT

Technology integration into the classroom has been a growing area of research for more than two decades but both qualitative and quantitative studies in this area revealed varied effects on the use of technology in the classes. The opinions of students can probably affect the use of technology in a class. This study, therefore, aims to investigate the opinions of ELT students about a technology-based classroom via a Likert scale survey. A total of 303 ELT students from a state university in Turkey participated in the study conducted in the 2019-2020 academic year. The outcome of this study established that students' opinions about a technology-based classroom are mostly positive. Furthermore, the use of a technology-based classroom is not common due to challenges such as inadequate technology-based classrooms, insufficient information about the use of the various types of devices and programs, lack of courses for the effective training of teachers, and limited knowledge of students on how to use this approach. The study also offers suggestions about using the technology-based classroom with modern technological tools and materials and its implementation in ELT settings in universities.

Keywords

English language learning, opinions of ELT students, technology-based classroom, technology integration, university setting

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Introduction

The English language has gradually become the lingua franca of the world. It is now a commonly used language in the world of business, education, and science. There are more speakers of English in the world of education, commerce, and science than in any language. The role of ICT in the process of globalization is vital and technology-based countries have progressed successfully in all facets of human development especially the economic benefit (Newby et al., 2013). In the sphere of education, technology-based instruction has changed pedagogy and its practices in the classroom. This has raised the fruitfulness and extensiveness of pedagogy (Al Harbi, 2014; Howard & Mozejko, 2015). As happening in many developed and developing countries, Turkey is swiftly changing and revising its routine particularly in the sphere of education. Several pieces of research attest to the fact that integrating technology in the curriculum increases students' results in the learning process. Teachers who see technology as a tool for solving problems tend to change their methodology. They change their pedagogy from a behavioral approach to a more constructionist approach. Interactive learning with the use of multimedia through technology is more conducive to project-based learning. Scholars

are involved in learning via the use of these tools. By doing so, they end up becoming originators and critical thinkers, not just users.

Technology-based classroom

The role of technology in education is increasing significantly due to the opportunities it presents to students to interact with a varied kind of content in English which could not be possible earlier. The usage of technology in studies is vital and is gradually taking center stage in the professional and higher education system (Almekhlafi & Almeqdadi, 2010). For more than two decades, the attention of educators on the role of technology in foreign/second language processes of instruction has increased. In recent times, the use of technology-based learning has delivered valuable and powerful ways with amelioration of educational materials for literature learning and teaching from both teachers and scholars of EFL (Gilakjani, 2012; Mohammed, 2012; Sa'd, 2014; Sadeghi, 2013).



Figure 1. A photo of a technology-based classroom

Perceptions of technology in daily life

It is a fact that the use of cell phones by students for purposes other than education may interrupt the classroom routine and impede learning. In addition, most teachers agree that the use of electronic devices by students in the classroom is not necessary. However, this does not mean that cell phone use should be banned in classrooms. Students consider technology as part of daily routines (Thomas et al., 2013). Some teachers still use outdated pedagogy such as sticking to the lecturing method throughout the lectures which result in limited interaction in the classroom. In such a classroom, students feel disconnected from the 'real world' and think that this type of classroom is false and artificial (Baker et al., 2012).

Integrating technology into the classroom

The technology-based classroom has come to help remove the ineffective and outdated methods of teaching and techniques by giving teachers the chance to plan a curriculum according to the differentiation instruction (Mulrine, 2007). In terms of its use in the classroom, not all technology upholds the purpose of the curriculum, but teachers maneuver to introduce technology into their classroom to help support teaching and learning (Zimlich, 2015). A digital tool such as Google Docs provides a scholar with a chance to work on a writing task collaboratively with their colleagues in distant locations (Eckstein, 2009).

Technology integration in language education

Technology-based classrooms are identified as classrooms where teaching and learning procedures depend on the use of all learning technologies comprising Cd-roms programs on multi-media, teaching and learning resources on the web, objects, or materials that promote students learning. Competencies exhibited by teachers to develop, manage, use and assess technology-based tools, systems, and processes are very important to the successful classroom implementation (Sani, 2014). Earlier research on language teachers' use of technology-based classrooms recommends that technology-based learning is used in a classroom to help teachers to design effective lessons. For instance, studies conducted by Hassanzadeh et al. (2012), and Nim Park and Son (2009) established that teachers use basic technology materials such as software 'apps' as tools of communication, teaching, and administration. Keengwe and Kang (2013) and Dang (2011) claim that lecturers of English as a foreign language used only basic technological applications for presentation and preparation.

Challenges and benefits of technology-based integration in language education

Studies on efficient use of the technology-based classroom in education have shown positive results, not only for English language learning but other language settings with the creation of authenticity (Nguyen, 2019). Another important benefit mentioned is learning independently (Houcine, 2011). A technology-based classroom promotes independent learning among students. It provides ways for students to have access to other foreign language learning materials. Interaction and communication in language education in a technology-based environment promotes students' confidence level, demonstrating that the knowledge in technology promotes both self-standing and collaborative approaches to international language acquisition skill and practice. A certain population of teachers is turning towards the use of games in the classes. Even though using technology-based approaches has many benefits, their use in the classroom and education has also posed many challenges such as their effects on students' thinking and learning as well as their intellectual abilities (Carr, 2010). For example, instant access to materials by students through technology lures them to believe and accept any knowledge provided via the internet. Students use this information without verification, acknowledgment, and evaluation (Keen, 2011). According to Parker et al., (2011), plagiarism and academic dishonesty behaviors by some students are a result of computers, the Internet, and technology. Digital natives, tech-savvy students, find it difficult to pay attention in class when they find themselves in a class where a lot of digital devices are within their reach. Students' dependence on technology as posited by Carr (2010) shortens the attention span of students and their ability to study independently and concentrate. This situation does not promote 'deep learning'. Students in this era of technology, study less effectively than students of a pre-technology era (Kolikant, 2010).

Factors influencing the implementation of technology-based classroom

Fullan (2007) claimed that changes in education happen at all levels: institutes of education, national and state levels, teachers, and students. For more than one-century introducing technology in teaching and learning has a connection to the changes in education. The role it

plays has become more pertinent and technology resources have been rapidly revealed (Howard & Mozejko, 2015). Hu and McGrath (2011) asserted that these factors stretch from administrative dynamics through institutions and individuals. The identification of the physical environment in which the participants operated becomes important together with the influences of social and historical factors that affect individuals' reasons and deeds (Murphy & Ivinson, 2003). The following research question guided the study: What are the opinions of ELT students on the technology-based classroom?

Methodology

The current descriptive research was conducted in a survey model. The survey model is intended to create statistics around a target populace. How this is done rests on gathering the characteristics of the aimed population from a section of respondents provided answers (Fowler, 2014). The survey includes five-point Likert items ('Strongly Agree' (5) to 'Strongly Disagree' (1)) to obtain the responses from the participants to given statements.

Population and sampling

The study was conducted on the students of the English Language Teaching Department at a state university in Turkey. The participants of the study were undergraduate students in the preparatory, first, second, third- and fourth-year classes. There were 583 students in the department. The number of students who participated in this study was 303. Table 1 below shows the distribution of participants in terms of gender, age, their class level. As seen in the table below, 118 (38.9%) of the participants are male while 185 of them (61.1%). There are 113 students under the age of 20 and their distribution percentage is 37.4%, and 184 students between the ages of 21-29 whose distribution percentage is 60.9%. Six students are between the ages of 30-39 and the distribution percentage of them is 1.7%.

Table 1. Frequency and percentage of gender, age, and class level

Gender	Frequency	Percentage
Male	118	38.9
Female	185	61.1
Age		
Under 20	113	37.4
21-29	184	60.9
30-39	6	1.7
Class level of participants		
Preparatory class	69	22.7
First-class	88	29.1
Second class	53	17.5
Third class	54	17.8
Fourth class	39	12.9
TOTAL	303	100.0

From the table, it can be seen that 69 of the participants are prep class students and the distribution percentage of these participants is 22.7%. Eighty-eight first-year students participated and the distribution percentage of these participants is 29.1%. Fifty-three second-year students participated and the distribution percentage of these participants is 17.5%. Fifty-four third-year students participated and the distribution percentage of these participants is

17.8%. Finally, 39 fourth-grade students participated and the distribution percentage of these participants is 12.9%.

Data collection tools and data analysis

The survey was used as the data collection tool in the study. The survey with 30 items was delivered to all students in hard copy, and through google forms. The survey was reviewed for validity and reliability. Based on the analysis, the Kaser-Meyer-Olkin (KMO) measure of sampling adequacy was found 0.87, and the Bartlett test 13202,921. Accordingly, the result of the Bartlett was found significant at the 0.05 level ($p=0.001$). The Cronbach alpha coefficients stipulate that a reliability coefficient of .70 or higher is considered 'acceptable' in most situations of research. The Cronbach alpha coefficient of this scale is 0.85. Quantitative research methods and techniques were used to examine the opinions of university students about the technology-based classroom approach in terms of various variables. IBM, Statistical package for social sciences (SPSS) 22 was used in the analysis of the collected quantitative data.

Findings

In this study, the opinions of ELT students on the technology-based classroom were investigated. Table 2 shows the results of the survey.

Table 2. Opinions of students about the use of technology-based classroom in English Language Departments

<i>The Use of Technology-Based Classroom in English Language Departments</i>	\bar{X}	SS
I can learn English on my own.	3.93	1.01
I can direct my own learning without a lecturer's supervision.	3.87	1.04
I can pronounce words correctly on my own.	3.90	1.05
I can think on my own without a teacher's guidance.	3.87	1.05
I can do Microsoft excel and word on my own.	4.33	0.89
I can send and receive email on my own.	4.33	0.93
I can use social networking sites.	4.33	0.88
I can use excel to analyze data.	3.48	1.11
I can search for information from the internet on my own.	4.27	0.91
I can solve English language problem on my own.	3.74	0.89
I understand the video watched in a technology-based classroom.	3.72	0.89
I developed speaking skills on my own.	3.67	0.92
I am sure about my ability to do my class exercise.	3.71	0.90
I am certain I can understand, do given the assignment on my own.	3.74	0.88
I am certain I can learn the concept and ideas of the English language in a technology-based classroom.	3.65	0.94
Students are motivated to come up with new ideas in technology-based classroom.	3.96	0.93
The use of technology devices motivates you to learn fast.	3.96	0.97
Doing your homework with the internet motivates you to be a creative learner.	3.94	0.97
I am not motivated to learn English when my teacher use technology while teaching English.	2.61	1.26
Lecturers can adopt skills for special needs by using technology to ensure equity.	2.58	0.99
Lecturers can use technology to translate English text for non-native speakers.	2.60	1.01
Lecturers can diversify their teaching by providing options for students who finish classwork early.	2.57	0.98
Lecturers can use online sign-up for conferences, parents' helper s and project presentation.	2.64	1.03
Lecturers can provide feedback on students' success and challenges.	2.37	1.01
I can access homework and projects via technology device online.	4.09	0.84
I can see my grades online immediately.	4.07	0.87
I can follow my class through class websites when am absent from class.	4.01	0.98
I can take digital notes on my tablets or IPAD.	3.88	0.99

When the results are examined, it is seen that the average mean of the first variable 'I can learn English on my own' is $\bar{X}=3.93$. Students agreed on a high level that they can study English on their own in a technology-based classroom. Students participating in the study agree with the statement of the item 'I can direct my own learning without the lecturers' supervision'

(\bar{X} =3.87). This result portrayed that students feel comfortable in a technology-based classroom and can direct their own learning when teachers are absent.

Students approved the statement of the item '*I can pronounce words correctly on my own*' (\bar{X} =3.90), indicating that students improve their pronunciation skills in the technology-based classroom.

Participants agree with the statement of '*I can think on my own without a lecturer's guidance*' (\bar{X} =3.87). From this result, it can be inferred that student in a technology-based classroom can initiate their thinking to solve their English language problems since technology-based classrooms offered various opportunities for students to solve their problems. The students agreed with the statement of '*I can do Microsoft excel and word on my own*' (\bar{X} =4.33). It is clear that students' use of technology-based gadgets in the technology-based classroom was positive and students improved their computer competency. Participants agree with the statements of '*I can send and receive email on my own*' (\bar{X} =4.33), '*I can use social networking sites*' (\bar{X} =4.33), and '*I can use excel to analyze data*' (\bar{X} =3.48), showing that they improved their computer use competence.

It is seen that the average mean of the ninth variable '*I can search for information from the internet on my own*' is (\bar{X} =4.27). With the item, students agreed that when teachers make use of technology-based classrooms in English lessons it helps them to improve their internet-search skills. It was revealed that they agree with the statement of the item '*I can solve English language problems on my own*' (\bar{X} =3.74). Technology-based helps develop students' ability to solve their English language problems on their own. The use of video in a technology-based classroom was also found beneficial by the students when the high level of agreement (\bar{X} =3.72) 'on the statement *I understand the videos watched in technology-based classroom*' is considered.

When their responses to the statements '*I develop speaking skills on my own*' (\bar{X} =3.67), '*I am sure about my ability to do my exercise*' (\bar{X} =3.71), '*I am certain I can understand and do given assignments on my own*' (\bar{X} =3.74), '*I am certain I can learn the concept and ideas of English language in a technology-based classroom*'. Based on the results of the mean (\bar{X} =3.65) are considered, it can be inferred that a technology-based classroom helps them to develop their speaking skills, enables them to work independently on exercises and assignments, and increase their English comprehension levels on the concepts and ideas.

When their responses to the statements "*Students are motivated to come out with new ideas in a technology-based classroom*" (\bar{X} =3.96), '*The use of technology devices motivates students to learn fast*' (\bar{X} =3.96) and '*Doing homework with internet motivates learners to be creative learners*' (\bar{X} =3.94) are analyzed, it can be seen that the technology-based classroom motivates them to come up with new ideas and learn faster and helps them to become creative thinkers and learners. When their responses to the statement of '*We are not motivated to learn English when our teachers use technology while teaching English*' (\bar{X} =2.61), it can be inferred that they preferred to see their teachers using technology in teaching English to them for them to become more motivated and to perform better. Klopfer et al., (2009) also claim that a technology-based classroom motivates students to do better in an English language lesson.

When the statements '*lecturers can diversify their teaching by providing options for students to finish class early*' (\bar{X} =2.57), '*lecturers can use online sign-up for a conference, parents' helpers and project presentation*' (\bar{X} =2.64) and '*Lecturer can provide feedback on students' success and challenges*' (\bar{X} =2.37) are analyses, it is seen that the participants remained neutral in their responses to these statements. When considered the importance of

teacher feedback on students' success and challenges, it is interesting to note that the participants remained neutral.

When their responses to the statements '*I can access homework and projects via technology devices online*' ($\bar{X}=4.09$), '*I can see my grades online immediately*', with the mean value of ($\bar{X}=4.07$), '*I can follow my lesson through class websites even if am absent in from class*', '*I can take digital notes on my tablet or IPAD*' ($\bar{X}=3.88$) and '*I can have access to my digital portfolio*' ($\bar{X}=3.84$) are considered, it is seen that several benefits of learning English in a technology-based classroom were approved by the participants. The students think that they have easy access to their homework and projects, see their exam results in a short time, follow the lesson from the class website when they are absent, take notes digitally, and access to their digital portfolio to see what they learned and produced in the lessons.

Discussion

Students of ELT departments think that technology-based classroom contributes to their English learning. They believe that the use of technology-based classroom helps them to become self-directed learners and the majority of the students believe that with the technology they can learn English on their own. Also, they think that they can direct their learning without a teacher's supervision. The outcomes portrayed by respondents in this study demonstrated that even though technology-based classroom in the university is good, more things need to be done to increase their benefits; improving the equipment, installing modern devices and gadgets, introducing efficient courses for the training of teachers as well as educating students on the importance of technology-based classroom in language learning settings. A very important area of this study showcased is the one opined by Selwyn (2016), who believes that for technology to thrive in the classroom teachers and students ought to be 'technicians' instead of educators.

The majority of the students agree that they could direct their learning by searching for information on the internet for a given homework or assignment. Moreover, students revealed that a technology-based classroom develops their computer competence. This opinion of students agrees with the work of Mohammed (2015) which emphasized that students who study in the technology-based classroom developed their computer competence. They also indicated the important role of educational technology tools such as computers, smart boards, LCD projectors played in sustaining their interest in lessons extending their attention span in the classroom. These materials helped them to focus on what they were learning in the classroom. These findings are in line with those of studies conducted by Ahmed (2012) and Mohammed (2015) that revealed that in computer applications in the educational field, there are two 'cognition enhance'; the first one deals with computer materials which aid students to focus their task of learning on constructing the skills of thinking called 'Empowering environments'. This promotes critical thinking in students through the use of technology. The second part of 'cognitive enhances' talks about interactive media which combines all communications of the media like videos, pictures, CDs, DVDs, interactive games, animations, present lessons in the classroom, and impact knowledge. Each of these cognitions helps students improve their learning of the English language and develop their knowledge and experience.

Students are motivated and encouraged to give out their best in a technology-based classroom with the integration of technology in the teaching of language in the classrooms (Almekhlafi & Almeqdadi, 2010; Han, 2008; Kumar et al., 2008). In addition, we can deduce that students and teachers who have a better knowledge of the various types of technological

instruments will implement and use technology more in their language learning and teaching. The results of this study show that students' perceptions of the use of technology-based classrooms are mostly positive independent of their class levels.

Conclusion

The study provides important information about the opinions of students on the technology-based classroom. Firstly, a high percentage of the students has positive perceptions regarding the use of the technology-based classroom in the teaching and learning process of the English language. Furthermore, the departments of ELT should implement educational technology into their lessons via the use of technology-based classrooms. This can include the use of smart boards, computers DVDs, and CD players as well as educational sites like Khan Academy in their learning and technology-oriented learning and teaching materials. Even though the attitudes of learners are critical towards the success of technology integration, teachers must encourage them to use technology in their everyday learning.

In the literature, many studies revealed the students' positive perceptions towards the use of technology and technology-based classroom. A study conducted by Hawkar (2010) established that students' opinions and attitudes towards the implementation of technology in teaching and learning of language were encouraging, but the frequency of technology use in English language learning classrooms was inadequate because of insufficient technological materials. Durdu (2003) investigated the perceptions of students and teachers towards a web-based learning instrument for English courses as a second language at the elementary level. It was a website developed as supplementary materials for students of 8th grade. The outcome of the study revealed that the majority of the participants enjoyed the lesson and their performance increased in terms of vocabulary learning and speaking skills with the chat page. Also, students feel relax and well-composed with little anxiousness when they study in a technology-based classroom with materials and tools such as a computer (Önsoy, 2004). Another study by Ateş et al. (2006) came to the conclusion that implementing computer-assisted English instruction (CAEI) in an English language learning lesson had a bigger impact on the attitudes and opinions of high school students towards educational technology. The research revealed that because technology is part of students' life, they give more attention to lessons conducted with technology. Students of English language learning think that the use of technology helps them to improve their skills in speaking, listening, reading, and writing (Kasapoglu-Akyol, 2010).

The findings of this study also provided the following suggestion to improve the use of technology-based classrooms in ELT settings at the university level. First of all, technical support about the use of technology-based classrooms must be improved and amplified in the department of ELT of state universities. Also, stakeholders and the government should financially support the technology implementation in ELT departments. Moreover, teachers should teach students how to use internet resources to aid their English language learning through the use of technology and the sources on the Internet.

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Notes

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References

- Ahmed, J. (2012). English language teaching (ELT) and integration of media technology, JCC, King Abdul Aziz University, Jeddah. *Procedia- Social and Behavioral Sciences*, 47(2) 924-929.
<https://doi.org/10.1016/j.sbspro.2012.06.758>
- Al Harbi, H. E. M. (2014). Towards successful implementation of ICT in education. Paper presented at: *The 2014 WEI International Academic Conference Proceedings*, Vienna, Austria.
- Almekhlafi, A. G., & Almeqdadi, F. A. (2010). Teachers' perceptions of technology integration in the United Arab Emirates school classrooms. *Educational Technology & Society*, 13(1), 165-175.
- Ateş, A., Altunay, U., & Altun, E. (2006). The effect of computer assisted language instruction on high school preparatory students' attitude towards computers and English. *Journal of Theory and Practice in Education*, 2(2) 97-112.
- Baker, W. M., Lusk, E. J., & Neuhauser, K. L. (2012). On the use of cell phones and other electronic devices in the classroom: Evidence from a survey of faculty and students. *Journal of Education for Business*, 87(1), 275-289. <https://doi.org/10.1080/08832323.2011.622814>
- Carr, N. (2010). *The shallows: What the Internet is doing to our brains*. NY Norton.
- Dang, X. T. (2011). Factors influencing teachers' use of ICT in language: A case study of Hanoi University, Vietnam. The International Conference "ICT for Language Learning" 4th edition, 20th-21st October 2011, Florence, Italy.
- Durdu, L. (2003). *Web-based learning tool: design and development of an online basic English support material for young children at elementary level*. Unpublished Master's Thesis, Middle East Technical University, Ankara, Turkey.
- Eckstein, M. (2009). Enrichment 2.0: Gifted and talented education for the 21st century. *Gifted Child Today*, 32(1), 59-63. <https://doi.org/10.4219/gct-2009-841>
- Fowler, F. J. (2014). *Survey research methods*. SAGE Publications.
- Fullan, M. (2007). *The new meaning of educational change* (4th Ed.). Teachers College Press.
- Gilakjani, A. P. (2012). An analysis of factors affecting the use of computer technology in English language teaching and learning, *International Journal of Information and Education Technology*, 2(2), 45-65.
- Han, W. (2008). Benefits and barriers of computer assisted language learning and teaching. *US-China Foreign Language*, 6(9), 40-43.
- Hassanzadeh, V., Gholami, R., Allahyar, N., & Noordin, N. (2012). Motivation and personality traits of TESL postgraduate students towards the use of information and communications technology (ICT) in second language teaching. *English Language Teaching*, 5(4), 74-86.
<https://doi.org/10.5539/elt.v5n4p74>
- Hawkar, A. (2010). *Administrators', teachers' and students' perceptions about the benefit of and barriers to TELL at Konya University' Bilkent University*. Unpublished MA thesis, Ankara, Turkey.
- Houcine, S. (2011). The effects of ICT on learning/teaching in a foreign language. Retrieved from [https://conference.pixelonline.net/conferences/ICT4LL2011/common/DownloadPaperpdf/I BL69-437-FP-Houcine-ICT4LL](https://conference.pixelonline.net/conferences/ICT4LL2011/common/DownloadPaperpdf/I%20BL69-437-FP-Houcine-ICT4LL).
- Howard, S. K., & Mozejko, A. (2015). Teachers: technology, change and resistance. In M. J. Henderson & G. Romeo (Eds.), *Teaching and digital technologies: Big Issues and critical questions*, 5(2), 307-317.
<https://doi.org/10.1017/CBO9781316091968.030>
- Hu, Z., & McGrath, I. (2011). Innovation in higher education in China: Are teachers ready to integrate ICT in English language teaching? *Technology, Pedagogy and Education*, 20(1), 41-59.
<https://doi.org/10.1080/1475939X.2011.554014>
- Kasapoglu-Akyol, P. (2010). Using educational technology tools to improve language and communication skills of ESL students, *Novitas ROYAL (Research on Youth and Language)*, 4(2), 225-241.
- Keen, A. (2011). *The cult of the amateur: how blogs, myspace, youtube, and the rest of today's user-generated media are destroying our economy, our culture, and our values*. Boston, MA: Nicholas Brealey.
- Keengwe, J., & Kang, J. J. (2013). Preparing in-service language teachers to design and Implement technology-rich curriculum. *Education and Information Technologies*, 18(4), 609-619.
<https://doi.org/10.1007/s10639-012-9195-y>

- Klopfer, E., Osterweil, S., Groff, J., & Haas, J. (2009). Using the technology of today, in the classrooms today: The instructional power of digital games, social networking simulation and how teachers leverage them today. The Education arcade. Massachusetts Institute of Technology. Retrieved from http://education.mit.edu/papers/GamesSimeSocNets_EdArcade.pdf
- Kolikant, Y. B. D. (2010). Digital natives, better learners? students' beliefs about how the internet influenced their ability to learn. *Computers in Human Behaviour*, 26(6), 1384-1391. <https://doi.org/10.1016/j.chb.2010.04.012>
- Kumar, N., Rose, R. C., & D' Silva, J. L. (2008). Teachers' readiness to use technology in the classroom: An empirical study, *European Journal of Scientific Research*, 21(4), 603-616.
- Mohammed, A. E. (2012). *Technology enhanced language learning environment to support constructive teaching in social studies particularly in sociology at Salahaddin University in Erbil, Iraq*, Unpublished Master Thesis, Bilkent University, Ankara, Turkey.
- Mohammed, M. I. (2015). The perceptions of students and teachers about the benefits of and barriers to technology aided EFL. *Journal of Literature, Languages and Linguistics*, 13, 85-99.
- Mulrine, C. F. (2007). Creating a virtual environment for gifted and talented learners. *Gifted Child Today*, 30(2), 37-40. <https://doi.org/10.4219/gct-2007-30>
- Murphy, P., & Ivinson, G. (2003). Pedagogy and cultural knowledge: a sociocultural perspective. *Pedagogy, Culture & Society*, 11(1), 5-9. <https://doi.org/10.1080/14681360300200157>
- Newby, L., Hite, J., Hite, S., & Mugimu, C. (2013). Technology and education: ICT in Ugandan secondary schools. *Education and Information Technologies*, 18(3), 515-530. <https://doi.org/10.1007/s10639-011-9180-x>
- Nguyen, T. T. L. (2019). *Using ICT to foster collaborative writing for EFL university students in Vietnam*. (Doctoral Dissertation), Edith Cowan University, Australia.
- Nim Park, C., & Son, J.-B. (2009). Implementing computer-assisted language learning in the EFL classroom: Teachers' perceptions and perspectives. *International Journal of Pedagogies and Learning*, 5(2), 80-101. <https://doi.org/10.5172/ijpl.5.2.80>
- Önsoy, S. (2004). *students' and teachers' attitudes towards the use of computer-assisted language learning at the preparatory school of Celal Bayar University*, Unpublished Master thesis, Bilkent University. Ankara, Turkey.
- Parker, K., Lenhart, A., & Moore, K. (2011). *The digital revolution and higher education: College presidents, public differ on value of online learning*. Retrieved from <https://eric.ed.gov/?id=ED524306>
- Sa'd, H. S. (2014). Implementing internet-based EFL teaching in Iran: (disadvantages, obstacles and challenges from EFL learners' viewpoint, *Journal of Language and Literature Education*, 10(1), 24- 40.
- Sadeghi, M. R. (2013). Computer assisted language instruction in EFL academic environment: A hindrance or a facilitator, *Basic Research Journal of Education Research and Review*, 2(6), 93-98.
- Sani, A. G. (2014). Towards the effective integration of ICT in educational practices; review of the situation in Nigeria *American Journal of Science and Technology*, 1(3), 116-121.
- Selwyn, N. (2016). *Is technology good for education?* John Wiley & Sons.
- Thomas, K. M., O'Bannon, B. W., & Bolton, N. (2013). Cell phones in the classroom: Teachers' perspectives of inclusion, benefits, and barriers. *Computers in The Schools*, 30(1), 295-308. <https://doi.org/10.1080/07380569.2013.844637>
- Zimlich, S. L. (2015). Using technology in gifted and talented education classrooms: The teachers' perspective. *Journal of Information Technology Education: Innovations in Practice*, 14, 101-124. <https://doi.org/10.28945/2209>

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