2023, 17(1), 30–46
Novitas-ROYAL (Research on Youth and Language)
ISSN: 1307–4733

Research Article

Turkish EFL Learners' Perspectives Regarding the Use of Online Lab

Zekiye SEİS

PhD Candidate, Anadolu University, Eskişehir, TURKEY
zekiye_seis@anadolu.edu.tr
ORCID: 0000-0003-4773-2607

Article information

Submission	15/07/2022	Revision received	21/03/2023
Acceptance	28/03/2023	Publication date	26/04/2023

Keywords:

online lab

English language teaching

virtual learning environment

Abstract: This study aimed to explore Turkish EFL learners' perceptions and opinions on using online lab during their language learning process. Online lab is one of the educational systems named virtual learning environments (VLEs) that contribute to EFL learners' language learning process. In this research, the participants were twelve students enrolled in the intensive English language learning program at a state university in Turkey. Research data were collected through reflective journals and a focus group interview at the end of the semester. Thematic analysis was employed to analyse the data, and the emerging themes and categories were presented. The findings revealed that the participants mainly had positive attitudes towards using the online lab in their learning process, and that improving receptive and productive skills and providing various learning opportunities were the most beneficial aspects of the online lab, whereas there were some negative sides, such as some physical and psychological effects and technological problems using online lab. In line with the findings, this study offers some suggestions both for practitioners and researchers.

Anahtar Sözcükler:

çevrimiçi laboratuvar

İngilizce öğretimi

sanal öğrenme ortamı

Yabancı Dil Olarak İngilizce Öğrenen Türk Öğrencilerin Çevrimiçi Laboratuvar Kullanımına İlişkin Bakış Açıları

Özet: Bu çalışma, İngilizceyi yabancı dil olarak öğrenen Türk öğrencilerin dil öğrenme süreçlerinde çevrimiçi laboratuvar kullanımına ilişkin algılarını ve görüşlerini araştırmayı amaçlamıştır. Çevrimiçi laboratuvar, İngilizce öğrenenlerin dil öğrenme sürecine katkıda bulunan Sanal Öğrenme Ortamları (VLE) olarak adlandırılan eğitim sistemlerinden biridir. Bu araştırmanın katılımcıları, Türkiye'de bir devlet üniversitesinde yoğun İngilizce dil öğrenme programına kayıtlı on iki öğrenciden oluşmaktadır. Araştırma verileri, yansıtıcı günlükler ve dönem sonunda yapılan odak grup görüşmesi aracılığıyla toplanmıştır. Verileri analiz etmek için tematik analiz kullanılmış ve ortaya çıkan temalar ve kategoriler sunulmuştur. Bulgular, katılımcıların dil öğrenme süreçlerinde çevrimiçi laboratuvarı kullanmaya yönelik olumlu bir tutuma sahip olduklarını, alıcı ve üretken becerileri geliştirmenin ve çeşitli öğrenme fırsatları sağlamanın çevrimiçi laboratuvarın en yararlı yönleri olduğunu ama diğer yandan kullanım sırasında bazı fiziksel ve psikolojik etkiler ve teknolojik sorunlar gibi olumsuz yönlerinin de olduğunu ortaya koymuştur. Elde edilen bulgular doğrultusunda bu çalışma, hem uygulayıcılara hem de araştırmacılara bazı öneriler sunmaktadır.

To Cite This Article: Seis, Z. (2023). Turkish EFL learners' perspectives regarding the use of online lab. *Novitas-ROYAL (Research on Youth and Language)*, *17*(1), 30–46.

1. Introduction

As in many aspects of our lives, the dynamics of education have changed with the use of technology. Technology has been included in language teaching and learning since the invention of the computer, and computer-assisted language learning (CALL) (Warschauer, 2004) has revolutionized the education system. As Bax (2003) explains, the integration of technology has offered integrative approaches, requiring students to learn how to use various technological tools in their continuous language-learning process. In fact, with the sudden emergence of the Covid-19 pandemic, the importance of technology in language education has become evident, and it has rapidly advanced from basic technological applications to professional implementations (Tawafak, Malik & Alfarsi, 2021). Hence, educational technology is now widely used at schools around the world that have overwhelmingly favored using e-learning. As a model of e-learning, Anderson (2008) explains that there is an interaction among learners, teachers, and content. Based on his theory of online learning, this interaction can occur in a community of inquiry utilizing a number of synchronous and asynchronous net-based (video, audio, virtual world) interrelations. These settings are exceptionally rich and enable individuals to gain social skills, collaborate, and form personal connections as described in social constructivism described by Vygotsky (Powell & Kalina, 2009) to define and elucidate learning and teaching as intricate, interacting social interactions between teachers and students (Picciano, 2017) as well as the content. Anderson (2008) states that the independent learning system of online learning includes computer-assisted learning tutorials, drills, simulations, and virtual labs where students perform investigations and have access to advanced search tools.

Moreover, these online tools have formed new virtual education settings, one of which is a virtual learning environment (VLE). VLE is defined as "the IT systems used to provide students with location-independent access to various features in support of their learning experience" (Tobin, 2016, p. 4) and includes e-learning software and many different platforms (e.g., Online lab, Moodle, Blackboard, Mergen etc.) that are utilized by many organizations (Sus, Revenchuk, Bauzha & Zagorodnyuk, 2021). According to Das (2014), the usage of VLE incorporates life or overtime activities, blended learning, individual and group work, assessment, and different types of uses that may be effectively integrated into a course and could require technical expertise (Ahmed, Elmi & Zakaria, 2012). As the studies point out, positive outcomes such as student retention and academic achievement (Kuh, 2001) and students' cognitive and personal development are obtained via VLEs (Pascarella, Seifert & Blaich, 2010), since student participation with VLEs might lead the learners to feel at ease through interaction, and a variety of implementations in a VLE facilitate "communication, collaboration, and enhanced learning" (Risquez, McAvinia, Raftery, O'Riordan, Harding, Cosgrove & Farrelly, 2013, p. 102) in student communities as social constructivist theorists presented. Briefly, the principles of social constructivism are social interaction, active learning, and scaffolding may be supported via VLEs (Finnegan, 2018). Therefore, VLE is a comprehensive concept that encompasses CALL or e-learning systems, one of which is the online lab.

As an authentic lab equipment, online labs has made considerable improvements in education technology over the past ten years, allowing students to engage with virtual environments while collecting real data (Purkayastha, Surapaneni, Maity, Rajapuri & Gichoya, 2019). As the virtual world promotes many interactions between teachers and students, online labs are also interchangeably regarded as web-based homework and online homework. Arasasingham, Martorell and McIntire (2011, p. 78) claim that online homework

can be interesting to learners, provide possibilities for independent study, present useful feedback, and give a variety of practice opportunities. It is also highlighted by the same study that online homework allocates easiness for assigning and checking homework via the virtual system. Considering all these, online labs could be seen as a supportive tool in language teaching and offer great opportunities for students and teachers since online homework system enables teachers to update current material (Dodson, 2014).

1.1. Literature Review

The use of online labs through language learning and teaching has been discussed in different contexts. In international contexts, some researchers have focused on the efficiency of getting feedback after using online labs while doing homework (Hodge, Richardson & York, 2009; Newby, Stepich, Lehman & Russell, 2006), and this feedback delivery has brought about more positive impact on student learning compared to homework without feedback (Walberg, Paschal & Weinstein, 1985). Likewise, Tallent-Runnels, Thomas, Lan, Cooper, Ahern, Shaw, and Liu (2006) reported comprehensive guidelines by examining the literature, and the studies conducted (quantitative, qualitative, and mixed methods) on online teaching and learning address the importance of the concern of this study. In addition, when the students submit their assignments, they may get the chance to observe their own practices (Molotsi, 2020). The studies by Hodge et al. (2009) searched for the level of students' motivation and perceptions of learning while doing online homework. Similarly, Campbell and Sarac (2018) emphasized how technology can be implemented into language learning to increase students' motivation and enhance their understanding. Sipilä (2009) also asserted that successful and motivated students had positive opinions and thoughts about the benefits of technological tools. In another study, Rubio (2012) proposed that a well-designed blended course with online and offline features can successfully optimize the motivation and performance of the learners in second language teaching. Moreover, many researchers have indicated distinctive features of online labs examining the experiences and perceptions of teachers about online education and the implementation of web-supported education with the changing world employing a qualitative meta-synthesis design (Gagne & Walters, 2009), several factors related to e-learning such as information and communications technology training and support (Bagarukayo & Kalema, 2015), fostering learners' success with the blended learning system and virtual classroom applications (Dikmenli & Ünaldı, 2013), facilitating e-learning processes with exciting and interactive content for the users in South Africa (Molotsi, 2020), and examining the instructors' attitudes about VLE and propensity for using the VLE as a teaching tool in Malaysia (Rashid, Shukor, Tasir & Na, 2021).

Regarding the national context, some studies report well-documented quantitative studies offering descriptive statistics analysis related to online homework. Yalçın and Şevik (2020) concentrated on their study to see how online English as a Foreign Language (EFL) assignments affect student progress at a university vocational school and found out that the success rate of students who completed online tasks was nearly double that of those who completed pen-and-paper assignments. Gazi Yıldırım, Erdogan and Cigdem (2016) carried out a mixed-method study to investigate the usability of a web-based assignment system conducted in a vocational college, and their study demonstrated that the students liked the system. However, they faced obstacles due to a lack of time and difficulty accessing computers and the web-based assignment system. Also, in another study by Çakmak (2022), the impact of chatbot-human contact with the chatbot Replika on L2 speaking ability and speaking anxiety was examined. The results showed that there were unfavorable attitudes and views concerning the chatbot engagement for the students who claimed that they felt

more nervous while speaking in a second language, but the student performance on Replika was far superior to their face-to-face peer interactions (Çakmak, 2022). Demirkol and Dişlen Dağgöl (2022) conducted a study to examine the classroom interactional competence (CIC) to determine whether there were any variations between their CIC displays in face-to-face situations and synchronous online teaching and revealed that EFL teachers were more eager to present in face-to-face courses. This showed that the reevaluation of online teaching presentations was vital from pre-service teacher education through in-service teacher training and that the notion of CIC should be expanded to incorporate elements focused on e-platforms. Moreover, Hamutoglu, Gemikonakli, Savasci and Gultekin (2018) asserted that there was a gap in measuring students' contentment with the usage of VLE in the Turkish context and focused on creating a scale to measure students' satisfaction with VLE use in educational contexts to close this gap.

On the other hand, few national and international studies have examined how English language learners perceive the usage of technology throughout the learning process (Dayag, 2018; Herrera, 2017). Also, it is well-acknowledged that further studies employing qualitative procedures need to be conducted to bring to light the attitudes of the learners towards online homework (Bıyıklı, Şener, Dönmezer & Denktaş, 2019; Yıldız & Sahin, 2017).

Therefore, it is thought that exploring the perceptions and in-depth ideas of English language learners by employing qualitative procedures towards the use of online labs would make a significant contribution to the literature as there is a scarcity of research. As the online lab system, Oxford Online Practice (IQ3e) has been applied in this study and hereafter referred as the online lab. Besides, the findings of this study may have significant benefits for lecturers, instructors, teachers, and other EFL stakeholders, presenting EFL learners' perceptions of the online lab and enabling them to find solutions to the problems encountered. Moreover, the application of the online lab in the EFL context and the advantages of using technology both in and outside classes could receive particular attention. Therefore, the purpose of this study is to answer the following research questions:

1. How do English language learners view the online lab in the EFL setting?
2. How can the online lab assist English language students in their learning process?

2. Method

2.1. Research Design

In this study, a descriptive case study research design was employed as this type of research design allows the researcher to capture the intricacy of real-life occurrences (Stake, 1995). According to Lambert and Lambert (2012), qualitative descriptive research thoroughly summarizes particular experiences that individuals or groups of people have encountered. Thus, the rationale for conducting this descriptive research was to provide an opportunity for the learners to express, in their own words, the present state of the utilization of the Oxford Online Practice (IQ3e), the online lab system in this study, in EFL classes at the tertiary level, any challenges they might be experiencing, and their perceptions of the online lab.

2.2. Research Context

In several departments and programs of universities in Turkey, English is the medium of instruction. Students are required to have a sufficient English proficiency level to succeed in the courses. All students are expected to take the proficiency/level test every academic year.

According to the exam results, students who do not have the necessary English language skills to continue their studies in their departments are required to join the English Preparatory Program to improve their English proficiency.

The study was carried out in the English preparatory program of a Turkish state university in the fall semester of the 2021-2022 academic year. In the classes of the preparatory program, there were 25-30 students, and each class was equipped with projectors and internet access. Besides, the students were enrolled in online classes. The students could access their schedule, assignments, course curriculum, discussion boards, and grades through the online lab. Also, the students could discover their course readings, additional assignments, and teacher announcements in that course location. Links to any other tools utilized by the course, such as wikis, blogs, and collaborative virtual rooms, could also be found there.

2.3. Participants

The participants of the study were determined through purposeful sampling. According to Creswell (2012), "in qualitative research, we identify our participants and sites on purposeful sampling, based on places and people that can best help us understand our central phenomenon" (p. 205), and for this reason, twelve participants who experienced online lab in and out of class regularly and who were eager to keep journals voluntarily were included since they were thought to be information-rich (Patton, 2001) for the current study. Each of the participants was in the elementary group of the English preparatory programs of a state university. They were all Turkish native speakers and non-native speakers of English and were enrolled in software engineering, biomedical engineering, aerospace engineering, electrical and electronic engineering, and the industrial engineering department. Their ages ranged from 17 to 23. Six of them were male, and six of them were female. Also, they were in the same class for nearly three months at the time of the research. The participants had ten hours of the main course, four hours of reading, four hours of listening and speaking, and four hours of writing courses in class. Additionally, they were enrolled in online classes and could access all online lab tools.

2.4. Data Collection Tools

This study employed qualitative procedures, and therefore, the qualitative data were collected through reflective journals and a focus-group interview. The first data collection tool was reflective journals (in other words, personal reflections, Dyment & O'Connell, 2010) since reflective journals are used in many professional areas, including counselling, nursing, education, and law (Hubbs & Brand, 2005) to get deeper ideas of the respondents. Therefore, the purpose of choosing reflective journals was to ask the learners to link their personal experiences and beliefs to course content and to obtain the participants' online lab experience with the directed writings especially considering the English level of the learners. The participants were asked to record their thoughts, reactions, and actions about using the online lab in their journals during their daily learning process. Moreover, they were told to write about the challenges and opportunities of the online lab while doing online homework. Also, they were encouraged to include information about each skill used, such as listening, reading, writing, speaking and their experiences, and to consider important aspects of the online lab while writing their journals. The participants were free to keep electronic or print reflective journals and were asked to write their perceptions in English within 4-week-online-lab-use.

Another data collection tool was a focus group interview, which is considered "advantageous when the interaction among interviewees will likely yield the best information and when

interviewees are similar to and cooperative with each other" (Creswell, 2012, p. 218). In a focus group interview, a group of individuals is chosen and asked about their opinions or perceptions of a certain subject or theme. There is an interactive environment throughout a focus group interview, and the participants are allowed to discuss with each other. Thus, more details about the research could be gained.

2.5. Data Collection Process

At the beginning of the data collection process, the Ethics Committee Permission was obtained from the Ethical Committee of the university, and the research began in October 2021. Then, the researcher asked for the respondents' consent via consent forms. Moreover, the participants were informed beforehand about all aspects of the research as it required the usage of VLE both in class implementations and in the learners' individual practices at their home. Following that, the participants began using the online lab throughout their four-week language learning process, and they started completing their online assignments and recording their thoughts in their reflective journals daily. At the end of the fourth week, the participants shared their journals with the researcher.

Then, a focus group interview was conducted with seven volunteer participants who kept journals systematically. By determining the meeting time, the participants were invited to have a focus group interview. Before starting the interview, a comfortable setting in a circle seating was created. The moderator (the researcher) formed pre-determined questions, used purposeful talk at the beginning of the interview, and began recording the discussion. The participants were questioned in an interactive atmosphere and encouraged to exchange ideas with one another openly and to share their perceptions about the use of the online lab in their language learning context. While listening to the participants' ideas, the researcher also took field notes based on her observations during the interview and recorded the interview with three mobile phone voice recorders, a recorder, and a laptop to prevent any obstacles and get data properly. The data collection process lasted two months and ended in December 2021.

2.6. Data Analysis

After collecting the reflective journals from twelve participants and the perspectives of seven participants through a focus group interview, the data were analysed based on thematic analysis (Braun & Clarke, 2006). Initially, the researchers performed line-by-line coding to describe the thinking flow of each participant in reflective journals and focus group interviews. Next, initial categories were generated from those codes, and finally, the emerging themes based on these initial categories were presented.

Several procedures were followed to ensure the trustworthiness of the current study. First, two different data collection tools were used to triangulate the data. Moreover, as external auditing, the details of the coding process and the formation of categories and themes were shared with three scholars in the field, one of whom had five years of experience in qualitative research. Finally, member-checking was also employed by asking the participants to check and confirm their ideas in the reflection reports and the interview, as Lincoln and Guba (1985) modelled to provide the trustworthiness of qualitative research studies.

3. Findings

The research questions of the study aimed to explore the perceptions of the participating EFL learners regarding the online lab and how they benefited from it during their learning process. The data were derived from reflective journals and a focus group interview and the findings that emerged from the dataset were carefully analyzed, and the emerging codes, themes, and categories are presented in Table 1.

Table 1.

The Codes, Themes, and Categories that Emerged from the Qualitative Data Analysis

Codes	Themes	Categories
• Useful for listening activities • Reading online [articles, novels, many texts on different topics, texts for levels] • Activities	Receptive Skills	Functional Dimensions
• Different writing activities on the Net • Practicing • Speaking with foreigners	Productive Skills	
• Speeding up • Learning easily • Accessible • Improving language • Using applications • Many options for learning • Reaching many sources • Efficient for regular use	Learning Opportunities	
• Body health problems • Having headache • Not focusing easily • Tiredness • Not knowing mistakes • Not seeing anybody on the screen • Missing face-to-face lessons • Feeling the need to use books/pens	Physical & Psychological Negative Effect	Dysfunctional Dimensions
• Internet connection trouble • Risky to use • Disconnection • Lack of battery • Not practical for recording voice	Technological deficiencies	

While gathering data, two different tools (reflective journals and focus group interview) were used. The main use of reflective journals and focus group interview was explained by Mertens (2009), who stated that both reflective journals and focus groups are research strategies to find out different perspectives. Thus, in this research, reflective journals (RJ) were personal recordings of the twelve participant students' educational experiences and their learning-related incidents via the online lab during the learning process in the class and out of class. The students' journals indicated the students' own thoughts about English language course content, materials, assignments, and tests and their positive and negative opinions about the

use of the online lab. Following journals, a focus group interview (FG) was conducted with a small group of participants (seven learners) to deepen data in a social context as this group could easily express themselves in group settings rather than individually. The main advantage of focus-group interview was to deepen the thoughts of the students and to provide a setting to compare their ideas orally and verbally, to be able to understand their feeling better, to prevent misunderstandings that may occur in the use of language, to ensure that the data were obtained correctly and consistently, and to create an opportunity for the students to express their ideas more easily. The data analysis presented in Table 1 identified two major strands of the use of the online lab; functional and dysfunctional dimensions, and the themes related to these two major strands are presented with excerpts from the learners' remarks in the following part.

3.1. Functional Dimensions

The data analysis obtained from reflective journals and a focus group interview identified the participants' agreement on the positive side of the use of the online lab. Their positive thoughts and satisfaction with the receptive skills, productive skills, and learning opportunities were frequently implicated and emerged as themes.

3.1.1. Receptive skills

The participants underlined the use of the online lab while learning and using receptive skills, reading, and listening. The students who recognized the importance of reading stated how important this skill is in their reflective journals, and their statements about reading were presented week by week. Through the first week of reflective journals, the students wrote their thoughts into their journals and stated the importance of reading with these extracts:

> S2: *Online lab provides convenience. It helps us learn English more easily. The reading part is quite eye-catching. (*RJ, W1)

The students frequently referred to their satisfaction with the online reading materials by making it obvious that there were many options that could help them understand their reading studies. Compared with the first week, the students had more positive ideas about reading online via VLE (Online labs):

> S9*: When I read, I meet many difficult words. But I have discovered an app-Wordhippo. It is very useful for me to understand those difficult words.* (RJ, W1)

In the third week of journal writing, the students indicated that the texts they needed to read differed as their level changed. For this reason, the words in the texts were harder than the texts in the previous weeks (S7, S5, S9, S11, S12, S6; RJ, W3). On the other hand, the other students also commented that they needed to study more words. Moreover, in the fourth week, the learners expressed the effectiveness of reading and the importance of this skill in their academic life **(**S6, S4; RJ, W4). In the focus group interview, the students specified that it was significant for them to learn the reading skill effectively and it was possible for them to acquire this skill by using Online Lab. They stated the following opinions on this issue:

> S2*: I sometimes read e-books. So, the online lab is quite useful. We can read articles or novels. Also, we can exercise too.* (FGI)

S2 explained that the online lab promoted reading as the lab offered articles and novels and supported student success. In addition, S1 indicated that while reading online, it was a good way of learning new words.

> S1: *I listen to music, read books online. These activities develop me. I think we can learn new words by reading books online.* (FGI)

Briefly, reading had a vital role in improving the learners' comprehension through the learning process. Besides reading, the other receptive skill was also pointed out in the data analysis. Like reading, listening also helped them obtain pre-existing knowledge to produce the target language.

> S5: *Today, I watched English videos for listening. I think the best online activity is listening because we have a lot of options.* (RJ, W1)

S2, S7, S6, S4, and S12 (RJ, W1) found listening very difficult due to pronunciation varieties. However, they also commented that they would be able to improve themselves by listening more. The other students also found listening activities in the online lab enjoyable (S3, RJ, W1). In the following reflective journal, students stated that they started using different listening applications.

> S8: *Today I watched a TV show called the Office. And I am trying to listen to the song every day, so I listened today too. I practised with the application. Its name is 'the Simpler'.* (RJ, W2)

S5 liked the listening part and believed that the listening task was the best part of improving pronunciation skills, and it was easy for S9 and S7 but difficult for S1, S3, S4, S5, S2, and S6. The fourth week was the final week of writing reflective journals. Some students noticed when integrated exercises were available, they gave variation through the learning process, which kept them engaged and allowed them to revise what had already been taught:

> S5: *I practised listening and speaking class online today. I think it affects my listening skills in a good way.* (RJ, W4).

Throughout the focus group interview, the participants clarified why the online lab was fundamental for learning English with these extracts:

> S3: *I think the online lab is useful for me to improve my listening skills. It contains a lot of listening activities. For example, listening to text from different people is very helpful for me to improve my listening skills.* (FGI)

Parallel to the listening skill, some of the participants also touched upon some other benefits of the online lab:

> S9: *I am so happy today. This time, I was able to hear more sentences in my listening practice. I believe that I will improve my listening skill. Online listening texts are really helpful.* (RJ)

> S7: *In my opinion, listening practices are very useful. I could not understand many sentences in the first listening. But I realized that I understood more words and sentences in the following listening.* (FGI)

Based on these statements, it can be concluded that the online lab not only contributed to the improvement of the receptive skills of the learners but also provided many opportunities for them to do more practice the components of those skills.

3.1.2. Productive skills

As for the productive skills, the learners first highlighted the pronunciation practices in the online lab, and they stated that it provided many different exercises to help them do pronunciation exercises:

> S3: *Recording and listening to my own voice helps me correct my pronunciation.* (RJ, W1).

In addition, they noted that they tried to improve their speaking skill by presenting projects in front of the public, which motivated them:

> S8: *I studied for my project. I will do a presentation on Thursday, and I am going to talk about my book.* (RJ, W2).

Throughout the fourth week, most of the students (S1, S2, S4, S5, S6, S7, S9, S10, S11, RJ, W4) wrote that they realized the need to speak English more:

> S3: *I think it helps this subject. Because there are few English speakers in Turkey, so we learn English in a virtual environment.* (FGI)

On the other hand, most of the students identified how pivotal writing was for their language learning:

> S7: *Today I practised listening and writing. It takes some time to write, but it helps. Online writing and writing on paper both work equally well.* (FGI)

Some students have favoured note-taking skills throughout their writing classes as it is the first time to write while listening:

> S3: *Note-writing activities are very useful.* (RJ, W3)

Some students have claimed that integrated activities develop their learning and make them feel more willing to do the tasks:

> S6: *I did my homework online today. I practised speaking, listening, and writing. It was useful for me.* (RJ, W4)

The participating students shared their views about using the online lab related to the core, receptive, and productive skills, both in their journals and comfortably expressed in the focus group interview. It was concluded that the learners were concerned about learning English and developing their primary abilities to listen, read, speak, and write. In addition, the participants also remarked on the opportunities offered by the online lab to the learners.

3.1.3. Language opportunities

When it comes to learning opportunities, students expressed that especially ubiquitous mobile technology allowing learners to carry the online lab for anytime-anywhere was an important opportunity for them. Also, the learners used it as an app for active learning:

> S7: *While I was going to the dormitory today, I wanted to do online homework. Because I traveled for around 1 hour by bus. So I wanted to spend my time by studying. The best solution is to do online homework.* (RJ, W3)

Students expressed that another opportunity that the online lab presented was to provide different activities through online homework that could be done individually or allowed them to do it together with the instructor of the course, which reinforced not only social learning by communicating with the teacher but also increased social communication in their learning process.

> S4: *I think it has more benefits. It really can help learn English. We can reach many different sources. And thanks to them, we can improve ourselves without getting bored.* (FGI)

Some students reported that online lab met their practical needs since they did not live in an English-speaking country. Specifically, learning materials were created depending on the learners' needs.

3.2. Dysfunctional Dimensions

In addition to all these positive aspects, students also faced problems throughout the use of the online lab dimensions. Some participating learners also mentioned some negative points regarding the use of the online lab. These points were claimed to have negatively impacted these learners, especially mentally. These were classified as physical and psychological negative effects and technological deficiencies.

3.2.1. The physical and psychological negative effects

The most frequent statements related to the negative sides of the online lab were about its physical and psychological effects on students. Some learners claimed that their health was negatively affected by looking at the screen and keeping their bodies stable to do homework or study.

> S1: *In my opinion, VLE is both harmful and useful. Useful because it improves our language skills. Harmful because if we spend too much time, it spoils our health, such as eye disorders.* (FGI)

> S6: …*When I looked at the screen of the phone, I didn't focus on my homework. In addition, I had a headache.* (RJ, W4).

In addition to this negative physical effect, some of the participants expressed that their willingness and motivation were sometimes negatively influenced during the online lab process:

> S6: *I think it doesn't enough for speaking skill. Because being face to face is more effective in speaking skill.* (FGI)

Some participants believed that as for their writing skills, using pen and paper in normal face-to-face classes contributed to their improvement more than writing in the online lab as it took more time:

> S7: *Writing practice takes a long time as they are using a keyboard. But I prefer to write with pen and paper. It is easier for me.* (FGI)

In addition to these, participants also expressed that they have had technical problems, though not many while studying and doing homework in the online lab, and their statements were covered under the technological deficiencies.

3.2.2. Technological deficiencies

One of the technological deficiencies that the learners touched upon was internet disconnection or battery draining:

> S6: "*I think it is risky because we can't use it when the internet disconnection or our phone battery runs out. So we can't learn when we want.*" (FGI)

Some students have had some difficulties with recording their own voice while speaking English:

> S3: "*…the Internet is causing problems in online lessons.*" (RJ, W1)

As can be seen from the findings, participants generally emphasized the positive aspects of using the online lab during their language learning process and expressed some minor problems they encountered. In general, they benefited from integrating the online lab into their language learning process; their positive perceptions were more dominant in their statements.

4. Discussion

The findings of this study revealed that the participants underlined the use of the online lab for improving receptive and productive skills. The reading skill was promoted via online lab reading practice opportunities as a receptive skill. In the same vein, Yunus, Yaacob, and Suliman (2020) also maintain that online labs contribute to reading comprehension activities. In another study conducted by Adlington and Wright (2013), the use of close reading exercises based on a virtual learning environment had a meaningful influence on student understanding and pleasure of reading. Parallel to the findings in the literature, in the current study, the participants tried to read in English online as often as possible as the online lab offered articles, novels, many texts on different topics, and texts for different purposes.

Moreover, the listening parts in the online lab helped the students improve their receptive skills (listening skills), according to the participants' remarks in this study. As Chen (2016) indicated, a virtual learning environment with the convenience of use has a favourable impact on students' language practices for all skills and especially for listening. Also, Kob, Kannapiran and Shah (2020) underlined that one of the most beneficial uses for online learning is mobile learning, which provides them with skills that will enable them to achieve in their academics and in their academics their future employment.

Another significant result of this study is related to productive skills. Chalak and Fouladi (2016) revealed that online labs and virtual learning environments promoted learners to become more involved in different online activities in terms of productive skills. The findings of this study were in line with Chalak and Fouladi's (2016) study, as it showed the learners' remarks and optimistic ideas related to productive skills while using the online lab. Moreover, Jurkovič and Mertelj (2015) investigated the benefits of using video materials to develop language skills in VLEs and the teachers' awareness; however, this research does not contain a determination of teachers' awareness of the subject but the learners' language development.

Another remarkable finding of this study is that the learners benefited from the applications for additional vocabulary practices as well as four skills advancement.

On the other hand, this research showed that the learners felt pleased and satisfied with using video materials by contributing to Jurkovič and Mertelj's work (2015), and they had the opportunity to discuss with their friends and teachers in online education. Likewise, it was highlighted that the advantage of VLE use was to enhance communication between instructors and students by providing discussion boards inside the VLE, as stated in the study by Rakicioglu-Soylemez and Akayoglu (2015).

Also, this study revealed the motivation factors using the online lab as the learners explained how they became more motivated even if they studied individually. Similarly, in the literature, students' motivation and knowledge were enhanced with technology use in language instruction (Campbell & Sarac, 2018), and several studies identified students' high motivation while using online education (Sipilä, 2009; Hodge et al., 2009). Parallel to those studies, the current study also demonstrated that the learners' perception was positive for the use of the online lab, and they generally felt more willing to use it.

An important determination of this study was that there could be many health problems in the case of heavy exposure to online education. This finding shows parallelism with the study conducted by Zheng, Wei, Li, Zhu and Ning (2016) investigated the most common physical problems due to Internet use and found that the participants had some common complaints like cervical pain, dry eyes, and decreased vision. Finally, it is concluded that the participants had some challenges when using, such as frequent Internet connection, battery problems, and other technological deficiencies. To some extent, Ataman (2020) highlighted technological problems, but in Ataman's study (2020), teachers using VLEs faced Internet access problems, which is different from this study because the main concern of this study was the learners' experiences with the use of the online lab.

5. Conclusion

This study, gathering data from reflective journals and focus group interviews, revealed several important points related to the online lab. Even though the results indicated that most of the students were aware of the importance of the use of the online lab in learning English, and they attempted to benefit from virtual activities in different skills with various learning opportunities and practical applications for the students, such as flexibility (opportunity in and out of the class environment), usability (different purposes), accessibility (reaching different materials) as well as connection and socialization (working with different students and lecturers from different universities or even across the world), some dysfunctional sides were also encountered in using the online lab by the students, which made them think of online education negatively and favor classroom-based learning. Teachers and students should be informed about all negative sides to prevent challenges while using technology in language learning and teaching, and with this way, many possibilities of technology can be used efficiently in the EFL context.

Though there is an excessive amount of study on the usage of the internet use and VLE, there is limited research on how EFL students reflect on their learning verbally and in writing while pursuing their foreign language studies. In this regard, it is believed that this study has various ramifications that might provide teachers with a path for the use of the online lab and could contribute to the practitioners who would like to integrate the online lab into their skill-based classes. Firstly, the use of technology and pedagogical instructions via

motivational representations should be covered in in-service education for teachers, and thus, they could merge reading, listening, speaking, and writing classes as well as grammar and vocabulary teaching with the online lab. When the teachers receive adequate information on how to use technology in their classes, the students hence could receive technological assistance and become more aware of technology use in their learning period in different courses. Secondly, as experienced throughout the pandemic, all the stakeholders, including parents and school administrators, should be involved in the collaborative psycho-social support systems via several online platforms such as mobile learning systems; therefore, the effectiveness of technology could be determined not only in the class environment but also in the social surrounding.

Another point that needs to be considered is that open online course management systems, digital learning systems, and learning management systems need to be added to the course curriculum by the administrators to mediate online learning. Finally, it is recommended that VLE encompasses the components that allow learners and instructors to engage in many types of online interactions, including online learning. Teachers and students can utilize such environments to present and share information and activities, as well as engage with one another. These systems can be used to teach a fully online course or as a supplement to traditional classroom instruction. In the modern world, a successful blended learning strategy as a pedagogical implication must be developed to foster opportunities for student interaction both inside and outside of the classroom, keep students actively engaged in learning and discussion, and motivate students by showcasing a wide range of technological applications. Training is crucial for both instructors and students to build language skills and improve the learning environment. Moreover, education practices should be revolutionized to obtain the desired results in teaching and learning English via technology to achieve teaching and learning objectives.

The study had some limitations. The study was conducted in a university context, and the findings might be limited to students' perspectives and views in this specific context. As for further research, studies with longitudinal perspectives may provide better results regarding the effectiveness of online environments during the language learning process of EFL learners. Also, the opinions of the teachers from different school contexts about the online lab can be compared with the students' opinions.

Note on Ethical Issues

The author confirms that ethical approval was obtained from Samsun University, Turkey. (Approval Date: December 2021).

References

Adlington, H., & Wright, G. (2013). Teaching close reading: A VLE-based approach. *Arts and Humanities in Higher Education*, *12*(4). https://doi.org/10.1177/1474022212458405

Ahmed, A. A., Zakaria, N. A., & Elmi, A. A. (2012). An evaluation of Virtual Learning Environment readiness in Higher Education Institutions (HEIs). *Journal of Information Systems Research and Innovation*, *2*, 86–94.

Anderson, T. (2008). *The theory and practice of online learning*. Athabasca University Press, Athabasca, Canada.

Arasasingham, R. D., Martorell, I., & McIntire, T. M. (2011). Online homework and student achievement in a large enrolment introductory science course. *Journal of College Science Teaching*, *40*(6), 70–79.

Ataman, E. (2000). The investigation of English teachers' views on computer assisted language learning. *The Universal Academic Research Journal*, *2*(1), 46–57.

Bagarukayo, E., & Kalema, B. (2015). Evaluation of e-learning usage in South African universities: A critical review. *International Journal of Education and Development Using Information and Communication Technology*, *11*(2), 168–183.

Bax, S. (2003). CALL–past, present and future. *System*, *31*(1), 13–28. https://doi.org/10.1016/S0346-251X(02)00071-4

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bıyıklı, C., Şener, A. K., Dönmezer, E. B., & Denktaş, A. (2019). Çevrimiçi dinleme ödevlerinin dinlediğini anlama becerisine etkisi. *Ege Eğitim Dergisi*, *20*(1). https://doi.org/10.12984/egeefd.379638

Campbell, C., & Sarac, B. (2018). The role of technology in language learning in the twenty-first century: Perspectives from academe, government, and the private sector. *Hispania*, *100*(5), 77–84.

Chalak, A., & Fouladi, F. (2016). Application of virtual team-working in teaching productive skills to Iranian EFL learners. *Theory and Practice in Language Studies*, *6*, 2215–2221.

Chen, Y.-L. (2016). The effects of virtual reality learning environment on student cognitive and linguistic development. *Asia-Pacific Education Researcher*, *25*(4), 637–646. https://doi.org/10.1007/s40299-016-0293-2

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.)*. Boston, MA: Pearson.

Çakmak, F. (2022). Chatbot-human interaction and its effects on EFL students' L2 speaking performance and speaking anxiety. *Novitas-ROYAL (Research on Youth and Language), 16*(2), 113–131.

Das, A. K. (2014). Fundamentals of virtual learning environments (VLE) and its components. *Indian Journal of Library and Information Science*, *8*(1), 41–48.

Dayag, J. D. (2018). EFL virtual learning environments: Perception, concerns and challenges. *Teaching English with Technology*, *4*, 20–33.

Demirkol, T., & Dişlen Dağgöl, G. (2022). Exploring classroom interactional competence in synchronous online teaching platforms: Insights from EFL instructors. *Novitas-ROYAL (Research on Youth and Language), 16*(2), 49–68.

Dikmenli, Y., & Ünaldı, U. E. (2013). Harmanlanmış öğrenme ve sanal sınıfa dönük öğrenci görüşleri. *Amasya Üniversitesi Eğitim Fakültesi Dergisi*, *2*(2), 326–347.

Dodson, J. R. (2014). The impact of online homework on class productivity. *Science Education International*, *25*(4), 354–371.

Dyment, J. E., & O'Connell, T.S. (2010). The quality of reflection in student journals: A review of limiting and enabling factors. *Innovative Higher Education 35*, 233–244. https://doi.org/10.1007/s10755-010-9143-y

Finnegan, M. (2018). *Moodle and Social Constructivism: Is Moodle Being Used as Constructed? A Case Study Analysis of Moodle Use in Teaching and Learning in the School of Business*) (Master's thesis, Galway-Mayo Institute of Technology (GMIT), Ireland.

Gagne, J., & Walters, K. (2009). Online teaching experience: A qualitative meta-synthesis study. *Journal of Online Learning and Teaching*, *5*(4), 577–589.

Gazi Yıldırım, O., Erdogan, T., & Cigdem, H. (2016). The investigation of the usability of web-based assignment system. *Journal of Theory and Practice in Education*, *13*(1), 1–9.

Herrera, L. (2017). Impact of implementing a virtual learning environment (VLE) in the EFL classroom. *Íkala, Revista De Lenguaje Y Cultura*, *22*(3), 479–498. https://doi.org/10.17533/udea.ikala.v22n03a07

Hamutoğlu, B. N., Gemikonaklı, O., Savaşçı, M., & Gultekin, G. S. (2018). Development of a scale to evaluate virtual learning environment satisfaction. *International Journal of Assessment Tools in Education*, *5*(2), 201–222. https://doi.org/10.21449/ijate.345150

Hodge, A., Richardson, J., & York, C. (2009). The impact of a web-based homework tool in university algebra courses on student learning and strategies. *MERLOT (Multimedia Educational Resource for Learning and Online Teaching), Journal of Online Learning and Teaching*, *5*(4), 618–629.

Hubbs, D., & Brand, C. F. (2005). The paper mirror: Understanding reflective journaling. *Journal of Experiential Education*, *28*, 60–71.

Jurkovic, V., & Merteli, D. (2015). Pedagogical uses of authentic video in ESP classrooms for developing language skills and enriching vocabulary. *Scripta Manent*, *9*(2), 15–33.

Kob, C. C., Kannapiran, S., & Shah, A. (2020). The usage of mobile learning: Comparative studies among technical and vocational education students in selected universities. *International Journal of Interactive Mobile Technologies (IJIM)*, *14*(5), 203–209. https://doi.org/10.3991/ijim.v14i05.13355

Kuh, G. D.(2001). The National Survey of Student Engagement: Conceptual framework and overview of psychometric properties. Bloomington, IN: Indiana University Center for Postsecondary Research and Planning, 1-26.

Lambert, V. A., & Lambert, C. E. (2012). Qualitative descriptive research: An acceptable design. *Pacific Rim International Journal of Nursing Research*, *16*, 255–256.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications. https://doi.org/10.1016/0147-1767(85)90062-8

Mertens, D. M. (2009). *Research methods in education and psychology: Integrating diversity with quantitative and qualitative approaches*. Thousand Oaks, CA: Sage Publications.

Molotsi, A. R. (2020). The university staff experience of using a virtual learning environment as a platform for e-learning. *Journal of Educational Technology and Online Learning*, *3*(2), 133–151. https://doi.org/10.31681/jetol.690917

Newby, T. J., Stepich, D., Lehman, J., & Russell, J. D. (2006*). Educational technology for teaching and learning*. Upper Saddle River, New Jersey: Pearson Merrill Prentice Hall.

Pascarella, E. T., Seifert, T. A., & Blaich, C. (2010). How effective are the NSSE benchmarks in predicting important educational outcomes? *Change*, *42*(1), 16–22. https://doi.org/10.1080/00091380903449060

Patton, M. Q. (2001). *Qualitative research and evaluation and methods* (3rd ed.). Beverly Hills, CA: Sage.

Picciano, A. G. (2017). Theories and frameworks for online education: Seeking an integrated model. *Online Learning*, *21*(3), 166–190. https://doi.org/10.24059/olj.v21i3.122

Purkayastha, S., Surapaneni, A. K., Maity, P., Rajapuri, A. S., & Gichoya, J. W. (2019). Critical components of formative assessment in process-oriented guided inquiry learning for online labs. *Electronic Journal of E-Learning*, *17*(2), 79–92. https://doi.org/10.34190/JEL.17.2.02

Powell, C. K., & Kalina, J. C. (2009). Cognitive and social constructivism: developing tools for an effective classroom. *Education*, *130*(2), 241–250.

Rakicioglu-Soylemez, A., & Akayoglu, S. (2015). Prospective EFL teachers' perceptions of using CALL in the classroom. *Innovative Professional Development Methods and Strategies for STEM Education*, 195–208.

Rashid, A. H. A., Shukor, N. A., Tasir, Z., & Na, K. S. (2021). Teachers' perceptions and readiness toward the implementation of virtual learning environment. *International Journal of Evaluation and Research in Education*, *10*(1), 209–214.

Risquez, A., McAvinia, C., Raftery, D., O'Riordan, F., Harding, N., Cosgrove, R., & Farrelly, T. (2013). An investigation of students' experiences of using virtual learning environments. *Implications for Academic Professional Development*.

Rubio, F. (2012). The effects of blended learning on second language fluency and proficiency. *The American Association of University Supervisors, Coordinators and Directors of Foreign Languages Programs (AAUSC)*, 137–159. Heinle Cengage Learning. https://doi.org/102015/69713

Sipilä, K. (2009). Students' attitudes toward ICT and VLE in basic education. In G. Siemens & C. Fulford (Eds.), *Proceedings of ED-MEDIA 2009--World Conference on Educational Multimedia, Hypermedia & Telecommunications* , 2304–2311. Honolulu, HI, USA: Association for the AdvancemSusent of Computing in Education (AACE).

Stake, R. (1995). *Case researcher roles, the art of case study research*. Thousand Oaks, CA: Sage Publications.

Sus, B., Reyenchuk, I., Bauzha, O., & Zagorodnyuk, S. (2021). Virtual laboratory as custom e-learning implementation and design solution. *CEUR Workshop Proceedings*, *2883*, 177–187.

Tallent-Runnels, M. K., Thomas, J. A., Lan, W., Cooper, S., Ahern, T. C., Shaw, S. M., & Liu, X. (2006). Teaching courses online: A review of the research. *Review of Educational Research*, *76*(1), 93–135. https://doi.org/10.3102/00346543076001093Ya

Tawafak, R. M., Malik, S. I., & Alfarsi, G. (2021). Impact of technologies during the COVID-19 pandemic for improving behavioral intention to use e-learning. *International Journal of Information and Communication Technology Education*, *17*(3), 137–150. https://doi.org/10.4018/ijicte.20210701.oa9

Tobin, B. (2016). *Increasing student engagement with virtual learning* (Master's thesis, Dublin Business School), Ireland. https://doi.org/10788/3218

Walberg, H. J., Paschal, R. A., & Weinstein, T. (2017). Homework's powerful effects on learning. *Educational Leadership*, *42*(7), 76–79.

Warschauer, M. (2004). Technological change and the future of CALL. In S. Fotos, & C. Brown, *New perspectives on CALL for second and foreign language classrooms*, (pp. 15–25). Mahwah, NJ: Lawrence Erlbaum Associates.

Yalçın, A., & Şevik, M. (2020). Online EFL assignments and success. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, *53*, 206–227. https://doi.org/10.21764/maeuefd.610406

Yıldız, N. M., & Şahin, E. (2017). Middle school students' attitudes toward online homework in science education: A case from a private school. *İstanbul Aydın Üniversitesi Eğitim Fakültesi Dergisi*, *3*(2), 1–12.

Yunus, M. M., Yaacob, N., & Suliman, A. (2020). The use of electronic frog VLE in assisting reading comprehension activities. *Universal Journal of Educational Research*, *8*(3), 879–887. https://doi.org/10.13189/ujer.2020.080319

Zheng, Y., Wei, D., Li, J., Zhu, T., & Ning, H. (2016). Internet use and its impact on individual physical health. *IEEE Access*, *4*, 5135–5142. https://doi.org/10.1109/ACCESS.2016.2602301