

ONLINE DISTANCE LEARNERS' PERCEPTIONS AND NEEDS FOR PERSONALIZED LEARNING IN ENGLISH AS A FOREIGN LANGUAGE COURSES

Zeynab Moosavi *Dorothy DeWitt

Department of Curriculum and Instructional Technology, Faculty of Education, Universiti Malaya *dorothy@um.edu.my

ABSTRACT

The rapid development of e-learning in higher education institutions has facilitated personalized learning pathways for learning to be relevant, catering to the individual learners' needs and expectations. In spite of the vast opportunities that e-learning offers, the online courses in distance language education in Iran failed to satisfactorily engage students. There is little effort to empower and give voice to students to improve instruction. Therefore, the aim of the study was to explore the needs and expectations of EFL students enrolled in online English courses at a distance learning institution. The study also examined the students' perceptions for a learner-centred approach, using personalized learning (PL) in their online English courses. A total of 200 students participated in the survey and five of them were invited to be interviewed. The study explored the issues in the existing online English courses, the students' expectations of an English course and their perceptions towards a PL approach for their online English courses. The results revealed the EFL students needed more support, multimedia learning resources, opportunities to practice speaking and listening, and a friendly communicative environment. The findings indicated that most students had positive perceptions on PL. The study suggested that distance education systems need to incorporate PL into online courses as a solution to address the students' learning needs.

Keywords: English as a foreign language (EFL), e-learning, personalized learning, higher education institutions (HEI), distance education

INTRODUCTION

Innovations and the rapid advancements in Information and Communication Technologies (ICT) have provided new opportunities and has changed the way we work and live. In education, ICT tools have been used to facilitate learning and to develop learning resources. Learning with new technologies and mobile devices, or e-learning means that learning can occur anywhere and anytime (Al Rawashdeh et al., 2021). For the purpose of this study, the definition provided by Alonso et al. (2005) is taken where e-learning is an online learning environment facilitated by the use of new multimedia technologies to improve the quality of learning, remote exchange, as well as collaboration. One of the advantages of e-learning is that relevant information can be provided to learners at a pace, place and time that is convenient for the learner. Emerging digital technologies now have the potential to customize instruction in educational settings to address individual learners' interest, abilities and needs, as well as for learners to independently direct their own learning process (Walkington, 2013). In other words, digital technologies allow for personalized learning, a learner-centered approach which enables teachers to



tailor their instructions and support to individual student's needs (Shemshack & Spector, 2020). This has extended to e-learning where new paths in teaching English as a Foreign Language (EFL) especially in higher education can be provided (Ja'ashan, 2020; Layali & Al-Shlowiy, 2020). E-learning is greatly beneficial for teaching English as a foreign language in countries such as Iran as instant access to immersive authentic and multimedia English materials is enabled with e-learning (Seidi et al., 2014; Al Aroud & Yunus, 2020). In addition, e-learning can enhance engagement, interaction and collaboration among EFL learners (Martin & Parker, 2014). The many benefits of e-learning have been identified in many studies (Al Aroud & Yunus, 2020; Azmi, 2017), but research still shows that many of EFL learners are not satisfied with e-learning (Efriana, 2021; Mahyoob, 2020; Susilowati, 2020). This situation is also reflected in Iran (Mohamadzadeh et al., 2012; Mahmoodi-Shahrebabaki, 2014). This could be due to the ineffective approaches within e-learning programs in higher education institutions. As Alamri et al. (2021) also pointed out that most higher education institutes rely on a "one-size-fits-all" teaching approach using ICT tools without focusing on learners' individual differences or personalizing to the learner. However, many research studies indicated that the "one size fits all" approach of instruction does not prepare learners for today's challenges (Felder & Brent, 2005; Taft et al., 2019).

Therefore, there is a need for a systemic change in higher education to focus on learner-centered environments which can address the specific needs of learners and enhance the development of skills required for the 21st century (Abdelmalak & Trespalacios, 2013; Benlahcene et al., 2020; Brezicha et al., 2015; Taft et al., 2019). Hence, it has to be highlighted that the mere availability of e-learning does not guarantee the success in its implementation and it is advised that stakeholders in higher education institutions accept innovative and creative teaching strategies to take advantage of the unique features and capabilities of e-learning in line with the current technologies (Sharoff, 2019). In Iran, there is increasing interest and emphasis to move towards learner-centered approaches in higher education. Despite this focus, the traditional teacher-centered approach is still dominant as little attention is given to the English language students' voice (Alizadeh, 2018; Amiri & Saberi, 2017).

Consequently, as suggested by Denis and Frances (2014), there is a need to ensure e-learning programs meet the diverse needs of higher education students. As Haddad and Draxler (2002) have also emphasized that learning technologies and e-learning programs alone are not effective in engaging learners in learning. Hence, a personalized learning (PL) approach, which takes into account the needs and interests of the individual students might be suitable for providing a learner-centered approach for distance foreign language students. As Jung and Graf (2008) described, a PL approach has high potential to help students in learning English language by adapting the learning process to their individual needs.

Therefore, this study attempted to identify the Iranian EFL students' needs and their suggestions for a better language learning experience in their online courses. In addition, the study investigated the need of a PL approach as the solution to address the distance learning students' needs and interests. For this purpose, a distance learning institution in Iran was selected in order to answer the following research questions:

- 1. What are the existing challenges of learning English as a foreign language at distance learning institutions in Iran?
- 2. What are the students' perceptions on their needs for incorporating a personalized learning approach in their online English courses?

Distance Education in Iran

The distance education university in the context of the study was established in 1987. This university is the largest public university in Iran and in the Middle East offering online distance learning programs (Hakimzadeh, et al., 2016; Zohoor, 1993). A number of active study centers at this university provide students with Bachelors, Masters, and Doctoral degree programs in different disciplines across the country. The most important objective of the university has been to provide educational programs for a vast number of students under the motto of 'Education for everyone, everywhere, and at every time'. As a result of such convenience, a wide range of students can have anywhere anytime access to lectures and course materials and learn at their own pace. However, to be effective for all students, such learning



environments must address the diverse needs of each student. To this end, eLearning systems must incorporate a PL into online courses that addresses students' individual learning needs and provides the opportunity to enhance the skills required for this era (Alamri et al., 2021). However, it seems that relatively few studies have been conducted on the needs and expectations of EFL students, and even fewer in Iran.

In this university, undergraduate students are required to enrol in three-unit credit of General English courses for all fields of study and another four units of English for Specific Purposes (ESP) course related to their majors (Farhady et al., 2010). While English language is a required subject in higher education institutes in Iran, the university does not seem to address students' needs for improving their English skills (Rassouli & Osam, 2019; Amiri & Saberi, 2017). However, little attention has given to this issue. Therefore, this study seeks to investigate EFL students' voice to explore the challenges they experience in the existing online English courses and to investigate their perceptions on the need to incorporate PL as an instructional approach to address their language learning needs.

Personalized Learning

In the 1970s, Peck highlighted the necessity of personalized training to be given for teachers and students. According to Peck (1970), personalized learning (PL) creates more effective teachers, who are trained to study children individually and devise learning experiences tailored to the particular child, and more effective students, who are more self-starting, more self-motivated, and more self-disciplined in their learning. Specifically, PL considers the host of the learner variables such as interests, learning style, set reading level, needs, attention span and the like in which provide the basis for the selection of the objectives, subject matter, activities, materials and devices for measuring the teaching-learning situation (Burr et al.,1972).

There are various definitions of PL, but all definitions agree to the fact that PL emphasizes the individual student's interests and abilities. For instance, Thomas (2016) defines PL as an instruction in which learning objectives, content and activities, the pace of learning and the instructional approach all are relevant to learners' needs and interests. Thomas's (2016) definition of PL includes a learner-directed approach focusing on learners' interest, needs and abilities. It is believed that each learner is a unique individual and learns in different ways and at different paces. Nandigam et al. (2014) takes us a step further, stating, in a PL environment, instructors, peers, technology, context, as well as any other resources available for learning, are to be used flexibly to fulfill individual student learning needs.

To meet the challenge of individual needs, it is essential for teachers to provide students with multiple options to access the learning resources and to decide how they like to demonstrate what they have learned. Enabling students' choice and voice is the most essential step in creating a PL environment (LeGeros et al., 2022; Tenon & Epler, 2020). E-leaning technologies have made it easier than ever to personalize learning for students as they can allow anywhere, anytime access to learning materials, and support multiple methods for students to demonstrate what they have learned. Therefore, it is believed that e-learning technologies along with a PL approach can enable learners to have greater choice and control over their learning process to adapt the pace of their study to personal preferences (Conole, 2009; Jethro et al. 2012). For the purpose of the present study, we adopted the following definition of PL proposed by Graham et al. (2019): "Personalization involves giving students some element of control over customizing the goals, time, place, pace, and/or path of their learning experience" (p. 115). The integration of e-learning makes it easier for teachers to help their students in the ways that are best suited to their goals, time, place, pace and path (Graham et al., 2019). Teachers can take advantage of e-learning innovations as a powerful tool to address students' individual needs and offer learners more flexibility to choose language content, and ways of its delivery, place and time (Djoub, 2014).

METHODOLOGY

A mixed methods design, using both quantitative and qualitative data, was employed for this study to provide a deeper understanding of the research issue (Dawadi et al., 2021; Lall, 2021). The mixed



methods approach was chosen as it offers the best chance for the researchers to combine the strengths and overcome at the same time the weaknesses in another method (Johnson & Onwuegbuzie, 2004). As the purpose of this research was to gain more in-depth information regarding the EFL students' needs, challenges and interests at distance language learning, this method was considered suitable. In addition, the students' perceptions on the need to incorporate PL in their online English courses would be investigated. For this purpose, the quantitative data collected via questionnaires would be validated from interviews.

Participants

The sample was selected from Iranian EFL students enrolled in a Bachelor's degree program at a Distance Learning University in Iran. The students were selected from the whole population of students who took the 'General English' course subject, a compulsory 3-credit course for the Bachelor's degree programs at the university. All undergraduate EFL students are required to pass the compulsory General English course at the university. A total of 200 undergraduate students from different faculties: Engineering, Social Science, Business and Law, Humanities and the Arts, and Science completed the questionnaires.

In addition, five participants volunteered to be interviewed. The study tended to select the fourth-year distance language learning students to get more meaningful insights into the situation as they had more experience in language learning as well as they had experienced both face-to-face and e-learning.

Data Collection and Analysis

The data were collected via a Google Forms survey and descriptive statistics was used to analyze the data, followed by semi structured interviews to gather further information. The first part of the survey questionnaire requested the respondents' background information such as gender, age, and majors. The second section was on ownership and usage of technology devices to identify the kind of mobile devices the students had access at the distance education university in the context of the study. The final section of the questionnaire ranging from 1 = strongly disagree to 5 = strongly agree, was adapted from Graham et al (2019) to explore the students' perceptions on all five dimensions of personalization (goals, path, time, place, and pace).

The questionnaire was validated by two instructional technology and e-learning experts, as well as three linguists and English language specialists. In addition, to ensure that all the students understand the items written in English, the questionnaire was translated to Persian. Then, the accuracy of the translated questionnaire was assessed by a certified official translator from the Iranian Association of Certified Translators and Interpreters (IACTI). The certified translator was also an Iranian American linguist with 10-year experience in translating English academic texts to Persian. Before finalizing the survey, a pilot study was conducted with 30 undergraduate students in the same university to ensure the feasibility of the questionnaire. The overall reliability of the questionnaire had a Cronbach's alpha value of 0.91, which was considered acceptable (Nunnally, 1978).

The Google Forms were used to create the online survey which was then broadly published on the university's portal and Telegram Channel In addition, an email was sent to all students included the survey's link. At the beginning of the questionnaire, the purpose of the survey was elaborated and the informed consent of the participants was obtained. The average time required to complete the questionnaire was 10 to 15 minutes. The data collected were analyzed using percentages, means and standard deviation to determine the students' perceptions on implementing PL. The largest age groups were participants aged between 23 and 27 (47%, n = 94), and between 18 and 22 (31%, n = 62). Moreover, there were about equal proportions of male (n = 98, 49%) and female (n = 98

Additionally, an interview was conducted with five volunteers of students via WhatsApp since the participants were familiar and felt more comfortable with this platform. Then, data collected from the



semi-structured interview were transcribed and coded using a software for qualitative data analysis, NVIVO 12, in order to provide an in-depth analysis of themes (Anstead, 2016).

FINDINGS

Ownership, Usage and Accessibility of Technology Devices

The results revealed that the students owned at least one electronic device that the smart phone seemed to be preferred to other devices as all students were using smart phones. The high percentage of accessibility to mobile devices could improve accessibility to e-learning across time zones and locations where distance would not be an issue for the students.

Table 1Frequency and Percentage of Respondents' Ownership of Electronic Device

Electronic device Ownership	N	%
Basic Mobile Phone	175	87.5
Smart phone	200	100
Audio/Video Portable Player	177	88.5
Tablet PC	147	73.5
Laptop/Notebook	173	86.5
Personal desktop computer	140	70.0

The majority of the participants reported that they used word-processing software applications on their mobile device (97.5%, n = 195 accessed Word documents), as well as viewed PDF documents (99%, n = 198), Excel documents (90.5%, n = 181), Power Point documents (92%, n = 184), and Photos (98.5%, n = 197) on their devices (see Table 2).

Table 2 *Percentage of Respondents' Mobile Files*

File formats	N	%
Word document	195	97.5
PDF document	198	99.0
Excel document	181	90.5
Power Point document	184	92.0
Video files	200	100.0
Audio files	200	100.0
Photos/ Graphics	197	98.5

The findings revealed that majority of the students (80%, n = 160) used internet daily, while 25 (12.5%) used the Internet 5-6 days in a week, 10 students (5%) use it 3-4 days in a week, and 5 students (2.5%) do it 1- 2 days (see Table 3). The results imply the significance of the internet in the lives of the students.



Table 3 *Frequency and Percentage of Respondents' Use of Internet*

rrequeries and rei	centage of he	Spondents ose of internet
Use of internet	N	%
1- 2 days	5	2.5
3- 4 days	10	5.0
5-6 days	25	12.5
Everyday	160	80.0

Students' Perceptions on Incorporating Personalized Learning into Online Courses

The data indicated that a majority of the students (78.5%, n=157) liked to set some personal goals related to their interests, and they liked to have the freedom to choose the assignments and the due date (78%, n=156) (see Table 4). A larger majority of them (83.5%) expected their instructors to provide additional support to students who were struggling.

The findings revealed that 80% of the respondents (n = 160) wanted their instructors to provide them some options to track their own progress towards goals that they have set, and a majority (78%, n = 156) thought that they should be allowed to work at their own pace. Many students (80%, n = 160) liked to choose the activities that match their needs and interests.

In addition, the table shows that the majority of the respondents (81.5%, n = 163) wanted instructors to give them extra time to do what they needed to do as well as give them opportunity to determine the sequence of activities. The majority of them (81%, n = 162) wanted their instructors to be easily accessible to students. A large majority of them believed that having access to a variety of resources and technology tools helps their understanding (respectively, 80.5%, n = 161, 82%, n = 164).

Table 4Frequency and Percentage of Respondents' Perception on Personalized Learning

Items		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
1. Instructors should allow students to	n	9	9	<u></u> 25	77	80	4.0	1.0
set some personal goals related to their interests that they can work towards.	%	4.5	4.5	12.5	38.5	40	5	5
2. Students should be allowed to choose	n	4	14	26	70	86	4.1	1.0
from among a list of activities and the due date.	%	2	7	13	35	43	0	0
3. Students should be allowed to make	n	3	14	27	81	75	4.0	.96
choices about how to do activities (independently or on a team).	%	1.5	7	13.5	40.5	37.5	5	
4. Instructors should provide students	n	5	11	24	83	77	4.0	.97
some options to track their own progress towards goals that they have set.	%	2.5	5.5	12	41.5	38.5	8	
5. Instructors should provide additional	n	5	12	16	81	86	4.1	.98
support to students who are struggling.	%	2.5	6	8	40.5	43	5	
	n	5	20	12	87	76		



6. Instructors should give extra time for students to do what they need to do.	%	2.5	10	6	43.5	38	4.0 4	1.0 3
7. Instructors should provide flexible	n	8	10	24	87	71	4.0	1.0
deadlines on some activities.	%	4	5	12	43.5	35.5	1	2
8. Students should be allowed to choose	n	6	17	15	81	81		
where and with whom to work.	%	3	8.5	7.5	40.5	40.5	4.0 7	1.0 4
9. Students should be allowed to work	n	3	16	25	90	66	4	.96
at their own pace.	%	1.5	8	12	45	33		
10. Instructors should be easily	n	4	20	16	85	75	4.0	1.0
accessible to students.	%	2	10	8	42.5	37.5	3	2
11. Access to a variety of resources and	n	9	11	19	91	70	4.0	1.0
technology tools helps students understand new information.	%	4.5	5.5	9.5	45.5	35	1	4
12. Students should be allowed to	n	6	14	20	82	78	4.0	1.0
choose some activities based on their	%	3	7	10	41	39	6	2
interests and abilities.								
13. Students should be allowed to	n	9	13	15	89	74	4.0	1.0
determine the sequence of activities.	%	4.5	6.5	7.5	44.5	37	3	5

Students' Perceptions towards E-learning

Follow-up interviews were conducted with five participating students to provide more in-depth insights on the issues existed in e-learning, students' expectations of an online English course. They were asked to talk about their distance foreign language learning experience, how they felt, what they would like to be different, what were the benefits and the challenges of e-learning that they encountered. Then, the interview data were coded, analyzed and organized into themes. The analysis of the transcripts of interviews showed the following emergent themes: (a) Students' positive perceptions towards e-learning, (b) Students' challenges, and (c) Students' expectations.

Students' positive perceptions towards e-learning

The participants perceived e-learning to be valuable for getting information, connection and accessibility to the websites and learning materials and e-learning can help them to handle both their job and study, as evidenced below:

Students' challenges in learning English when using E-learning system

The study revealed that the lack of lecturer—learner interaction and lack of speaking practice courses are the major challenges that the distance language students face, as evidenced:

[&]quot;I can get information from different websites... I can easily connect to other students and share information."

[&]quot;I can find many interesting videos on YouTube, or TED.com, or there are many podcasts for improving my listening."

[&]quot;I can connect to my friends, a variety of resources and learning materials anywhere anytime."

[&]quot;I live in a remote area, so it helps me easily access to lecturers and peers."

[&]quot;It has made working and studying for me easier, I can do both at home."

[&]quot;Most of lecturers follow the coursebooks, they read the texts, and explain the meaning of new vocabulary in English. We have to listen to them all the time without any interaction."

[&]quot;We don't have opportunity to practice speaking and listening during the class".

[&]quot;Due to the limited time, most of English instructors ignore oral communication instruction."



The respondents reported that they feel shy or nervous speaking English in front of others, as They were worried to make mistake in front of others, as evidenced:

"I prefer remaining quiet and just being a listener because I am worried to make mistakes."

"I don't participate in discussions because I am afraid to use English incorrectly."

Other issue underlined by two of the interviewed respondents was related to poor Internet connectivity to take advantage of their virtual sessions.

"...because of insufficient bandwidth and slow internet connection it is difficult to follow the live lecture." "Understanding the lectures in our online English classes is even more challenging because the internet is continuously disconnected."

Lack of interactive and engaging materials, the length of lessons, and lack of a friendly learning atmosphere were other challenges reported by students.

"Instructors still extensively rely on just hard-copy learning resources."

"The course content is very frustrating and there are no attractive pictures and illustrations to make the content easy to understand."

"Our lecturers are very strict and unfriendly."

"There is no friendly and warm relationship between students and lecturers."

Students' Expectations of E-learning system

The students expected their instructors to make an attempt to create a friendly context to encourage them to ask their questions, as evidenced "In a comfortable environment, it is easier for me to express myself" and "providing a friendly situation encourage students to participate in discussions or share their opinions". They also made some suggestions for their learning materials in terms of accessibility.

They expected that instructors provide learning materials which are embedded with images, audio and video to be comprehensible to them and make them accessible to all.

"We need their help to provide relevant materials, web-based resources and electronic folders which are accessible anytime without the need to attend the virtual sessions."

"They should use illustrations, audio and video clips to make course content more comprehensible."

Interviewed students wanted their English instructors to put more emphasis on practicing communication in English to be able to get a better job in an international company or to travel to another country.

"Well, I have always liked to travel to other countries so I need to speak English with foreigners..."

"...you can attend international meetings and conferences and communicate with foreigners with confidence."

"...I can get a better job in an international company..."

Table 5

Summary of Themes from Interviews

Students' positive perceptions

getting information, connection and accessibility to the websites and learning materials

e-learning

towards



Challenges encountered by the students when using Elearning

- Lack of engaging learning materials.
- Lack of lecturer-learner interaction;
- Insufficient times to practice oral communication;
- Lack of a comfortable and communicative context;
- Feeling nervous or shy to speak English;
- Being afraid of making mistake in front of others;
- Lack of a friendly learning atmosphere;
- Lack of opportunity to practice speaking and listening;
- Slow internet connection.

Expectations

- Need a comfortable and communicative context;
- Have a chance to practice communicating;
- Easy access to comprehensible learning materials.

DISCUSSION

The purpose of the present study was to investigate distance language learning students' experience, needs and expectations of their online English courses. The study also examined the students' perceptions to embrace PL in e-learning systems. There is also consensus in prior studies that students' perceptions for a new learning innovation is necessary (Murugan et al., 2017; Razzaque & Hamdan, 2019).

Findings revealed that smartphones were one of the most commonly used devices among the students. These findings concurred with previous research (Iqbal & Bhatti, 2020; Rather & Rather, 2019) which emphasized that mobile devices were accessible and were used as a part of young generation's daily lives. The high percentage of accessibility to mobile devices also implied greater support for the use of these devices for learning purposes and could facilitate the incorporation of PL in online courses. The findings also indicated that their technology devices were equipped with different file formats (e.g., Word/PDF document, photos, and audio/video) that enabled the students to have access to multi-media learning materials. In other words, the relevant applications available on the students' electronic devices can facilitate the implementation of PL, as highlighted in previous studies (Kucirkova & Littleton, 2017; Lee et al., 2018).

Findings obtained from the survey revealed that the students had positive perceptions on all five dimensions of PL-goals, time, pace, place, and path. Majority of the students were interested to set goals that fit their needs and interests. Most students had positive attitudes towards personalizing path and pace as they liked to have opportunity to choose assignments based on their interests and abilities and be allowed to work at their own pace. Previous studies also have proved that having control and choice within PL can increase learners' responsibility, motivation and engagement in learning (Alamri et al., 2020; Morris, 2020). In addition, the students believed that instructors should provide a flexible instruction which is not restricted by time and place.



It is also evident from the findings of the study that the EFL students felt shy and nervous to speak English in front of their friends and instructors as they were afraid of making mistake. This finding is also consistent with previous studies (Isnaini, 2019; Riadil, 2020). Ducca (2014) found that the teacher's role and their positive feedbacks as key factors in promoting students' participation and self-confidence. In another study, Onyema et al. (2019) highlighted the effective role of online discussion forums as a communication tool where motivate students, especially shy ones, to freely express themselves with more confidence than they do in traditional instruction. Therefore, it is crucial for instructors reconsider the capabilities and the vast opportunities that e-learning can offer to tailor their instruction methods to their students' needs.

The findings also indicated that in spite of E-learning development in Iran, teachers still put much emphasis on the traditional approaches and extensively rely on just hard-copy learning resources. Most students voiced out that they needed more support, student-teacher interaction and attractive learning resources to compensate distance constraints and facilitate their understanding and learning. This implies that instructors have to revise their teaching methods and shift from a traditional teacher-centered instructional paradigm to a learner-centered one. However, as illustrated in the literature, a shift from traditional teaching approach to a learner-centered approach is not always easy especially for Iranian instructors who have been using more traditional teacher-centered approaches. Therefore, government has to provide training and development programs to prepare teachers for this shift and encourage them to move toward more customized and personalized learning environments that address the individual learner's needs and interests rather than becoming dependent on their teaching habits (Agrahari, 2016; Alamri et al., 2021).

CONCLUSION

The findings of the study revealed challenges encountered by the EFL students when using e-learning and their needs for incorporating a PL approach into their online courses. A future study could be conducted to investigate teaching challenges encountered by teachers when using e-learning system, and their readiness and perceptions towards the implementation of PL. In addition, more work is needed to seek educators' perception about what PL looks like in practice. Moreover, it would be valuable to investigate students' experiences regarding using PL.

REFERENCES

- Abdelmalak, M., & Trespalacios, J. (2013). Using a learner-centered approach to develop an educational technology course. *International Journal of Teaching and Learning in Higher Education, 25*(3), 324-332. https://www.isetl.org/ijtlhe/pdf/IJTLHE1534.pdf
- Agrahari, R. (2016). The nature of educational reform and change: From teacher-centered to student-centered learning. *Educational Quest, 7*(2), 133. https://doi.org/10.5958/2230-7311.2016.00030.1
- Alamri, H. A., Watson, S., & Watson, W. (2021). Learning technology models that support personalization within blended learning environments in higher education. *TechTrends*, *65*(1), 62-78. https://doi.org/10.1007/s11528-020-00530-3
- Al Aroud, B., & Yunus, K. (2020). The use of e-tools in learning English by EFL students at Yarmouk University. *International Journal of Education, Psychology and Counseling*, *5*(37), 72-81. https://doi.org/10.35631/IJEPC.537006
- Alizadeh, I. (2018). Exploring language learners' perception of the effectiveness of an English Language Teaching (ELT) program in Iran. *Cogent Education, 5*(1), 1-19 https://doi.org/10.1080/2331186X.2018.1553652
- Alonso, F., Lopez, G., Manrique, D., & Viñes, J. M. (2005). An instructional model for web-based elearning education with a blended learning process approach. *British Journal of Educational Technology*, *36*(2), 217–235. https://doi.org/10.1111/j.1467-8535.2005.00454.x
- Al Rawashdeh, A. Z., Mohammed, E. Y., Al Arab, A. R., Alara, M., & Al-Rawashdeh, B. (2021). Advantages and disadvantages of using e-learning in university education: Analyzing students'



- perspectives. *Electronic Journal of e-Learning, 19*(3), 107-117. https://files.eric.ed.gov/fulltext/EJ1296879.pdf
- Amiri, F., & Saberi, L. (2017). The impact of learner-centered approach on learners' motivation in Iranian EFL students. *International Academic Journal of Social Sciences, 4(1), 99-109. https://doi.org/10.9756/IAJSS/V6I1/1910015*
- Anstead, M. E. J. (2016). *Teachers Perceptions of Barriers to Universal Design for Learning* [Doctoral dissertation, Walden University]. ProQuest Dissertations & Theses Global. https://www.proquest.com/docview/1756272818?pq-origsite=gscholar&fromopenview=true
- Azmi, N. (2017). The benefits of using ICT in the EFL classroom: From perceived utility to potential challenges. *Journal of Educational and Social Research*, 7(1), 111. https://doi.org/10.5901/jesr.2017.v7n1p111
- Benlahcene, A., Lashari, S. A., Lashari, T. A., Shehzad, M. W., & Deli, W. (2020). Exploring the perception of students using student-centered learning approach in a Malaysian Public University. *International Journal of Higher Education, 9*(1), 204-217. https://doi.org/10.5430/ijhe.v9n1p204
- Brezicha, K., Bergmark, U., & Mitra, D. L. (2015). One size does not fit all: Differentiating leadership to support teachers in school reform. *Educational Administration Quarterly*, *51*(1), 96-132. https://doi.org/10.1177/0013161X14521632
- Burr, B., Mccully, T. H. O. M. A. S., & Wicker, K. (1972). Personalized Learning: Using unit approach to curriculum design. *Middle School Journal*, *3*(3), 34-37. https://doi.org/10.1080/00940771.1972.11495805
- Conole, G. (2009). Personalisation through technology-enhanced learning. In *Technology-supported environments for personalized learning: Methods and case studies (pp. 1-15).* IGI Global. https://doi.org/10.4018/978-1-60566-884-0.ch001
- Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed-Methods research: A discussion on its types, challenges, and criticisms. *Journal of Practical Studies in Education*, *2*(2), 25-36. https://doi.org/10.46809/jpse.v2i2.20.
- Denis, S., & Frances, N. (2014). E-learning for university effectiveness in the developing world. *Global Journal of Human-Social Science: G Linguistics & Education, 14* (3), 69–76. https://socialscienceresearch.org/index.php/GJHSS/article/view/1162
- Djoub, Z. (2014). Mobile Technology and Learner Autonomy in Language Learning. *Promoting Active Learning through the Integration of Mobile and Ubiquitous Technologies*, 194.
- Ducca, J. D. (2014). Positive oral encouragement in the EFL classroom, a case study through action research. *Revista de Lenguas Modernas*, (21). https://revistas.ucr.ac.cr/index.php/rlm/article/view/17414
- Efriana, L. (2021). Problems of online learning during covid-19 pandemic in EFL classroom and the solution. *JELITA*, 38-47. https://jurnal.stkipmb.ac.id/index.php/jelita/article/view/74/52
- Farhady, H., Hezaveh, F. S., & Hedayati, H. (2010). Reflections on foreign language education in Iran. *TESL-EJ*, *13*(4), 1-18. https://files.eric.ed.gov/fulltext/EJ898203.pdf
- Felder, R. M., & Brent, R. (2005). Understanding student differences. *Journal of Engineering Education*, 94(1), 57-72. https://doi.org/10.1002/j.2168-9830.2005.tb00829.x
- Graham, C. R., Borup, J., Short, C., & Archambault, L. (2019). *K–12 blended teaching: A guide to personalized learning and online integration.* EdTech Books. https://edtechbooks.org/k12blended
- Haddad, W. D., & Draxler, A. (2002). The dynamics of technologies for education. In Haddad, W.D. And Draxler, A. (eds.). *Technologies for education: Potentials, parameters, and prospects* (pp. 2-17). UNESCO. Washington DC: Academy for Educational Development. https://bit.ly/3Lx1uxm
- Hakimzadeh, R., Dehghani, M., Javadipour, M., & Malekipour, A. (2016). Investigating the challenges of the effective implementation of E-learning courses at Payame Noor University of Dehloran. *Interdisciplinary Journal of Virtual Learning in Medical Sciences*, 7(2). https://doi.org/10.5812/ijvlms.12153
- Iqbal, S., & Bhatti, Z. A. (2020). A qualitative exploration of teachers' perspective on smartphones usage in higher education in developing countries. *International Journal of Educational Technology in Higher Education*, 17(1), 1-16. https://doi.org/10.1186/s41239-020-00203-4



- Isnaini, N. (2019). *An analysis of students' speaking anxiety students of English foreign language (EFL) at the fifth semester English* [Doctoral dissertation, State Islamic University of Raden Intan Lampunguin]. http://repository.radenintan.ac.id/id/eprint/5800
- Ja'ashan, M. M. N. H. (2020). The challenges and prospects of using E-learning among EFL students in Bisha University. *Arab World English Journal, 11*(1), 124-137. https://doi.org/10.24093/awej/vol11no1.11
- Jethro, O. O., Grace, A. M., & Thomas, A. K. (2012). E-learning and its effects on teaching and learning in a global age. *Indian Journal of Education and Information Management, 1*(2), 73-78. https://hrmars.com/papers_submitted/8724/e-learning-and-its-effects-on-teaching-and-learning-in-a-global-age.pdf
- Johnson, R. B.B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14–26. https://doi.org/10.3102/0013189X033007014.
- Jung, J., & Graf, S. (2008, July). An approach for personalized web-based vocabulary learning through word association games. *International Symposium on Applications and the Internet* (pp. 325-328). IEEE. https://doi.org/10.1109/SAINT.2008.63
- Kucirkova, N., & Littleton, K. (2017). Developing personalised education for personal mobile technologies with the pluralisation agenda. *Oxford Review of Education, 43*(3), 276–288. https://doi.org/10.1080/03054985.2017.1305046
- Lall, D. (2021). Mixed-methods research: Why, when and how to use. *Indian Journal of Continuing Nursing Education*, *22*(2), 143. https://doi.org/10.4103/ijcn.ijcn_107_21
- Layali, K., & Al-Shlowiy, A. (2020). Students' perceptions of e-learning for ESL/EFL in Saudi universities at time of coronavirus: A literature review. *Indonesian EFL Journal*, 6(2), 97-108. https://doi.org/10.25134/ieflj.v6i2.3378
- Lee, D., Huh, Y., Lin, C. Y., & Reigeluth, C. M. (2018). Technology functions for personalized learning in learner-centered schools. *Educational Technology Research and Development*, *66*(5), 1269-1302. https://doi.org/10.1007/s11423-018-9615-9
- LeGeros, L., Bishop, P., Netcoh, S., & Downes, J. (2022). Informing the Implementation of Personalized Learning in the Middle Grades through a School-Wide Genius Hour. *RMLE Online, 45*(1), 1-22. https://doi.org/10.1080/19404476.2022.2009707
- Mahmoodi-Shahrebabaki, M. (2014). E-learning in Iran as a developing country: Challenges ahead and possible solutions. *International Journal of Research in Education Methodology, 6* (2), 788-795. https://doi.org/10.2139/ssrn.2514434
- Mahyoob, M. (2020). Challenges of e-learning during the COVID-19 pandemic experienced by EFL learners. *Arab World English Journal (AWEJ), 11*(4). https://doi.org/10.24093/awej/vol11no4.23
- Martin, F., & Parker, M. A. (2014). Use of synchronous virtual classrooms: Why, who, and how. *MERLOT Journal of Online Learning and Teaching, 10*(2), 192-210. https://bit.ly/3LxLsmK
- Mohamadzadeh, M., Farzaneh, J., & Mousavi, M. (2012). Challenges and strategies for e-learning development in the Payame Noor University of Iran. *Turkish Online Journal of Distance Education*, *13*(1), 148-159. https://dergipark.org.tr/en/pub/tojde/issue/16899/176127
- Morris, A L. P. (2020). *Personalized Learning: An Engagement Strategy for At-risk Student Populations* [Doctoral Dissertation, Murray State University]. Murray State's Digital Commons. https://digitalcommons.murraystate.edu/etd/172
- Murugan, A., Sai, G. T. B., & Lin, A. L. W. (2017). Technological readiness of UiTM students in using mobile phones in the English Language Classroom. *Malaysian Online Journal of Educational Technology*, *5*(2), 51-67. https://eric.ed.gov/?id=EJ1142394
- Nandigam, D., Tirumala, S. S., & Baghaei, N. (2014, December). Personalized learning: current status and potential. *E-Learning, e-Management and e-Services (IC3e)* (pp. 111-116). IEEE. https://ieeexplore.ieee.org/document/7081251.
- Nunnally, J. C. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill. https://www.scirp.org/(S(czeh2tfqyw2orz553k1w0r45))/reference/ReferencesPapers.aspx?ReferenceID=453912
- Onyema, E. M., Deborah, E. C., Alsayed, A. O., Noorulhasan, Q., & Sanober, S. (2019). Online discussion forum as a tool for interactive learning and communication. *International Journal of Recent Technology and Engineering*, 8(4), 4852-4859.



- Peck, R. F. (1970). Personalized education: an attainable goal in the seventies. In *Needs of elementary* and secondary education for the seventies, A compendium of policy papers, compiled by the general subcommittee on education of the committee on education and labor, house of representatives, ninety-first congress first session (pp. 643-49). Washington, D.C.: U.S. https://files.eric.ed.gov/fulltext/ED051137.pdf
- Rassouli, A., & Osam, N. (2019). English language education throughout Islamic Republic reign in Iran: Government policies and people's attitudes. *SAGE Open, 9*(2), 1-11. https://doi.org/10.1177/2158244019858435
- Rather, M. K., & Rather, S. A. (2019). Impact of smartphones on young generation. *Library Philosophy and Practice (e-journal)*, 1-10. https://digitalcommons.unl.edu/libphilprac/2384/
- Razzaque, A., & Hamdan, A. (2019). Students' learner-readiness empowers their imaginative-capacity as they interact while e-learning. *Espacios, 40(*41), 10-23. https://bit.ly/3s395vP
- Riadil, I. G. (2020). EFL Students in Speaking Skill: Identifying English Education Students' Perceptions of the Psychological Problems in Speaking. *Journal of English Teaching and Applied Linguistic, 2*(1), 8-20.
- Seidi, A., Dastnaee, T., & Hedayati, S. (2014), Developing electronic materials for language curriculum development: issues, obstacles, and implications, ICT & innovations in education. *International Electronic Journal*, *2*(1), 26-36. https://bit.ly/3rEdyVG
- Sharoff, L. (2019). Creative and innovative online teaching strategies: Facilitation for active participation. *Journal of Educators Online*, *16*(2), 1-9. https://doi.org/10.9743/JEO.2019.16.2.9
- Shemshack, A., & Spector, J. M. (2020). A systematic literature review of personalized learning terms. *Smart Learning Environments*, 7(1), 1-20. https://doi.org/10.1186/s40561-020-00140-9
- Susilowati, R. (2020). The challenges of online learning in listening class during covid-19 pandemic. *Edukasi Lingua Sastra, 18*(2), 56-72. https://doi.org/10.47637/elsa.v18i2.290
- Taft, S. H., Kesten, K., & El-Banna, M. M. (2019). One size does not fit all: Toward an evidence-based framework for determining online course enrollment sizes in higher education. *Online Learning*, 23(3), 188-233. https://doi.org/10.24059/olj.v23i3.1534
- Tenon, S. R., & Epler, P. (Eds.). (2020). *Evaluation of Principles and Best Practices in Personalized Learning*. IGI Global. https://doi.org/10.4018/978-1-7998-4237-8
- Thomas, S. (2016). *Future ready learning: Reimagining the role of technology in education.* National Education Technology Plan. Office of Educational Technology, US Department of Education. https://files.eric.ed.gov/fulltext/ED571884.pdf
- Walkington, C. A. (2013). Using adaptive learning technologies to personalize instruction to student interests: The impact of relevant contexts on performance and learning outcomes. *Journal of Educational Psychology*, 105(4), 932. https://doi.org/10.1037/a0031882
- Zohoor, H. (1993). The Islamic Republic of Iran. In Kato, H., Arger, & G. Wong, S. (Eds.), *Distance education in Asia and the pacific: country papers* (pp. 110-118). National Institute of Multimedia Education, Japan. https://unesdoc.unesco.org/ark:/48223/pf0000096635