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The Effectiveness of Using the Digital Enrichment Platform (iQ) of the English Language Course (Skills for Success 1&2) in Developing Female Students' Self-Learning Skills

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Abstract

This study aims to evaluate the effectiveness of using the digital enrichment (iQ) of the English language course (Skills for Success 1&2) at Applied Colleges in Al Qassim University in developing self-learning skills. So, the Reacher asks 'has the digital enrichment (iQ) of the English language course (Skills for Success) helped students to develop self-learning skills from their point of view?. To achieve the aim of the study, The experimental quantitative method in a quasi-experimental design was used in collecting data through the application of pre- and post-self learning scale. The sample was comprised of twenty female students and the data obtained from the study was analysed through a one sample t-test. The accuracy and reliability of the study tools were verified. The study revealed a high-level effect of using the digital enrichment platform (iQ) on the development of female students' self-learning skills. There are statistically significant differences at a significance level of 0.05 between the pre-post questionnaire of the self-learning skills in favour of the post questionnaire. The study recommended using digital enrichment platforms in developing different skills.

Keywords: Digital Learning, English Language, Self-Learning Skills, Al Qassim University.

Introduction

In recent years, the use of digital learning sources in educational contexts is gaining more attention because self learning issues forms an essential part of human's life. They are not limited to school and they can be available everywhere and at anytime. So, a global societal trend, which is the digitalisation, has spread.

The integration between education and technology has emerged as a great solution to address the persistent barriers to learning opportunities (Animashaun, Familoni, & Onyebuchi, 2024). In fact, Digitalisation intersects with lifelong learning opportunities. It is an ongoing process that was established before society was infused by digital technologies. The new conditions provided by digitalisation enable learning opportunities through new innovative ways of considering the combination of places and time modes to facilitate the idea of anyplace and anytime learning (Varghese and Mandal, 2020; Jaldemark, 2021). The digitalisation of society and the sector is going on for decades and is part of what some scholars call the learning society and some call the knowledge society. (Mozelius, Cleveland-Innes, Lindqvist, & Jaldemark, 2024).

There is an increasing trend towards the use of digital learning in schools, with investments reaching 18.66 billion US dollars by November 2020, and the overall market for online education projected to reach 350 billion US dollars by 2025 (Baxter, Floyd, & Jewitt, 2023). Mark Weiser, the American computer scientist, coined a term 'ubiquitous computing' in his short article in the magazine Scientific American, 1991. He heralded the advent of an age where computers would have really become 'personal', "The most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it. (Celeste, 2022, p. 254 & Baxter, Floyd & Jewitt, 2023).

The information revolution has resulted in the appearance of educational technology which include many modern and innovative methods and technologies that have contributed to the development and advancement of educational institutions, going beyond the limits, reducing costs, and providing personal experiences designed to meet different learner needs including distance education, computerized education, e-learning, and other accelerated learning systems, using smart electronic technologies (Aslan &Şeker, 2017).

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; Animashaun et al., 2024; Rott & Schmidt-Hertha, 2024). So, educational technology can facilitate access to educational resources, interactive learning experiences, and innovative teaching methodologies, thereby bridging the gap between learners and quality education (Eden, Chisom, & Adeniyi, 2024; Pinto & Leite, 2020).

Schuetze and Slowey (2020) report that the reform of the current higher education system appears to be in focus in most policy documents, which aim to open up new opportunities for developing lifelong learning initiatives. For example, the United Nations Educational, Scientific, and Cultural Organisation (UNESCO) suggests a wider and broader approach: "the right to education needs to be broadened to be lifelong and encompass the right to information, culture, science and connectivity" (UNESCO, 2021, p. 4 as cited in Phuoc,2023).

With the rapid progress and popularization of information technology, digitalisation has a strong impact on educational systems and it is continuously transforming and undergoing fundamental changes. The creation of innovative and transformative lifelong learning opportunities supports both asynchronous and synchronous teaching and learning activities in formal and informal educational settings (Mozelius, Cleveland-Innes, Lindqvist & Jaldemark, 2024). and students can use different digital tools and sources for learning, making classroom instruction more effective and flexible.

The existence and widespread availability of digital (infra) structures such as the internet, digital platforms or specific hardware/software combinations with automated systems are accompanied by changes in the whole society, for example in the area of interpersonal communication and The specific social sectors that can be significantly linked to the phenomena of digital transformation (Schrape, 2021). One of these sectors is continuing education, where changes can be seen, for example, in the area of programme design (Koscheck et al., 2022) Educational technology, therefore, is a powerful tool to accelerate and scale up progress towards educational goals, fostering good quality education while promoting lifelong learning opportunities (Vieira, 2020)

In productive Informal digital English learning practices (e.g. using social media to chat with other English users), learners produce language actively .However, in receptive Informal digital English learning activites (e.g. listening to English songs or watching English-language movies). , learners are consuming information and knowledge passively)Noughabi & Ghasemi, 2024(. learning a language is an interpersonal and social process (Gkonou 2021).

Informal digital learning of English is a phenomenon within computer-assisted language learning that draws extensive attention in language learning (Lee,2022). The notion of Informal digital learning of English includes computer-assisted language learning in digital settings (Sauro and Zourou 2019), online informal EFL learning (Kusyk 2017; Toffoli 2020), and autonomous language learning outside classrooms with the use of technology (Lai 2018). Informal digital learning of English is one's self-directed L2 learning in a digital setting with no attachment to formal L2 learning (Lee 2019).

The association between computer-assisted language learning activities and English Foreign Language learners can offer worthy ideas for educational designers—to design an informal/formal integrated learning mode using the digital technology that EFL learners frequently involved with (Mutiaraningrum, 2021). These platforms revolutionized the internet by facilitating user engagement and content creation. The interactive and collaborative nature of involving technology in education opens a new world of possibilities for language learning (Ahmadnejad,2024)

Al Suroor(2021) recommended creating new platforms and software, and improve existing ones so that they facilitate learning. Al Shamrani study (2019) examined the impact of digital learning on the educational process and the results showed that there are differences between the average responses of the sample members to all the axes of the impact of employing digital learning on the quality of the educational process and improving its outputs. The researcher recommends the need to promote the establishment of electronic groups to develop the pupils' teamwork skills, enhance the digital learning environment, independent learners and emphasis on self-teaching method.

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Digital platforms coincides with the principles of active learning as it promotes opportunities for integrating student-cantered approaches and interactive learning within technology-rich environments, hence, it helps students actively involved in active learning (Mansour, 2021). And that young people learn not only in schools, but also in the myriad of interactions across space and time that they encounter beyond formal education (see Moore, 2021).

With the rapid development in using smart electronic technologies in the educational process, educators have found broad prospects for implementing the principle of self-learning in its typical form, and self-learning is the way followed by the individual in the educational situations to acquire information and skills in accordance with his own capabilities and needs, so the learner takes the decision of when, where and how to learn. In addition, the learner is the primary responsible for his learning, the level of his cultural and cognitive progress, and the quality of decisions he takes (Al-Sherbeni& Al-Tantawi, 2006 as cited in Hadid,2022).

Statement of the Problem

The digital transformation has a great impact on the modern social, cultural and economic life. Therefore, it draws attention and become among the priorities of educational institutions in different societies. In addition, learners are expected to develop new skill sets in order to be able to cope with that impact.

However, Schmid and Petko (2019) illustrate that educational systems in the twenty-first century requires students to have skills to use digital technologies in order to develop lifelong learning skills and problem solving.

In addition, the results of the previous studies emphasized the importance of digital learning in developing different personal and educational skills. Phuoc (2023) points out that Digital technologies are an enabler and facilitator of lifelong learning and that educational institutions of all levels and modalities should invest to develop their digital maturity. Al Suroor(2024) said it is important to ensure the development of self-learning for students while Al Shamrani (2019) recommends the need to enhance the digital learning environment to have independent learners.

Moreover, the young generation, especially university students, should be provided with skills that are necessary to facilitate entering the age of science, with self learning skills enabling them to use the tools and platform of education effectively and flexibly. In sum the current study aimed to measure the effect of using a digital learning program on developing theirs self learning skills among Applied Art college students.

Research Questions

The Main Question

"What is the effectiveness of using the digital enrichment platform (iQ) of the English language course (Skills for Success 1&2) in developing self-learning skills of the female students at the applied college?".

The Sub Questions

To what extent does the used digital enrichment platform (iQ) of the English language course (Skills for Success 1&2) develop the organizational skills of self-learning from the point of view of the female students at the applied college ?To what extent does the used digital enrichment platform (iQ) of the English language course (Skills for Success 1&2) develop the guidance and control skills of self-learning from the point of view of the female students at the applied college ?

To what extent does the used digital enrichment platform (iQ) of the English language course (Skills for Success 1&2) develop the skills of using learning resources of self-learning from the point of view of the female students at the applied college?

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To what extent does the used digital enrichment platform (iQ) of the English language course (Skills for Success 1&2) develop self-assessment skills of self-learning from the point of view of the female students at the applied college?

Research Objectives

This study aims to evaluate the effectiveness of using the digital enrichment (iQ) of the English language course (Skills for Success 1&2) at Applied Colleges in Al Qassim University in developing self-learning skills.

Significance of the Study

EFL teachers: it will help EFL teachers to pay more attention to the students performance in the (IQ) in order to improve the students' self-learning skills.

University students: to pay more attention to the digital enrichments in order to improve their self-learning skills and academic achievement in EFL.

Further studies: the findings may support other studies which implement digital learning and self-learning.

Terms

Digital Enrichment Learning IQ

It is an online practice that extends learning beyond the classroom and is now suitable for mobile devices, giving students and teachers more freedom to access audio and video, and practice activities wherever they are". (Oxford University Press)

Self -Learning Skills

Self-learning is defined as "providing an atmosphere of freedom for the student to choose the learning subject and its tools, and organizes, implements, and evaluates learning according to his abilities and capabilities, and the teacher shares with him the guidance, facilitation and preparation of learning fields and sources, so that the learner becomes a teacher for himself(Taha & Emran, 2009 as cited in Hadid,2022).

Study Methodology

Methodology

- Approach: The current study adopts the quantitative research; quasi-experimental design.
- Participants: The population of this study consisted of 20 female students at Arrass Applied College in Al Qassim University. The sample was chosen purposively and the distribution was random.

Tools

Self-Learning Questionnaire

• A pilot study conducted on (11) students in order to calculate the internal consistency and reliability, as following:

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Internal Consistency

The internal consistency of the questionnaire was calculated by using Pearson correlation coefficient between the score of each question and the total score of the questionnaire, Table (1) shows the results:

Table (1). Pearson Correlation to Calculate the Internal Consistency of the Questionnaire

No	Pearson Correlation	No	Pearson Correlation
1	.623**	1	.844**
2	.795**	2	.831**
3	.809**	3	.883**
4	.833**	4	.728**
5	.845**	1	.699**
6	.801**	2	.864**
7	.698**	3	.900**
8	.744**	4	.782**
9	.823**	5	.757**
10	.827**	** (
11	.806**	. C	Correlation is significant at the 0.01 level
12	.819**		
1	.861**		
2	.747**		
3	.809**		
4	.790**		
5	.695**		
6	.917**		

Table (1) shows the following:

There is a statistically significant relationship between the score of each question and the total score of the questionnaire, which indicates that the questionnaire has internal consistency.

Reliability

The reliability of the questionnaire was calculated using Cronbach's alpha equation. Table (2) shows the results

Table (2). Cronbach's Alpha Equation Result of the Questionnaire

Reliability Statistics	
Cronbach's Alpha	N of Items

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.977	27
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Table (2) shows the following:

The Cronbach Alpha result for the questionnaire is statistically high, as Abu Hashem (2003) indicates that the reliability coefficient is considered statistically high if its value is higher than (0.80), which indicates the reliability of the questionnaire.

Procedure

The survey was administered to participants at the end of the first term of the academic year of 2024 and was returned by 20 participants. The survey link was sent to learners through WhatsApp groups. Through the tool introduction participants were briefed about the purpose of the survey and that their participation was only voluntary.

Results:

The Main Question

"What is the effectiveness of using digital enrichment (iQ) of the English language course (Skills for Success 1&2) in developing self-learning skills of the female students at the applied college?". To answer the main question of the study, the hypothesis of the study which stated that "there are statistically significant differences at a significance level of 0.05 due to the effectiveness of the used digital enrichment platform (iQ) of the English language course (Skills for Success 1&2) in developing the self-learning skills of the female students at the applied college students between the pre-post questionnaire in favour of the post questionnaire" was tested through an independent sample t-test. The effect size of Eta Squared (η 2) was calculated to define the effect size of the independent variable (the used digital enrichment platform (iQ)) on the dependent variable (self-learning skills) as follows:

Table (1) t-test

	N	Mean	SD	t	df	Sig.	η2	Effect
								size
Pre-questionnaire	20	113.09	11.040		19			
Post-	20	122.22	13.123	3.30	19	0.04	.51	high
questionnaire								

The Sub-Questions

The Organizational Skills of Self-learning

To what extent does the used digital enrichment platform (iQ) of the English language course (Skills for Success 1&2) develop the organizational skills of self-learning from the point of view of the female students at the applied college?

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Table (2). The Mean, Standard Deviation, Rank, for the Answers of the Organizational Skills of Self-Learning of The Female Students

		0. 1		N.T.	0. 1	1.				
N o	Questions	Strongl y agree	agre e	Neutr al	Strongl y disagre e	disagre e	percentag e	Mea n	Std. Deviatio	Ran k
1	IQ helped me to communica te with other learners in an educational group via social media	5	13	1	0	0	83%	4.15	0.58	5
2	IQ helped me set my own goals precisely.	6	13	1			85%	4.25	0.55	3
3	IQ helped me manage my time for learning effectively.	6	10	4			82%	4.10	0.71	6
4	IQ helped me organize my priorities according to what I suits me.	8	10	2			86%	4.30	0.65	2
5	IQ helped me determine what I need from educational platforms, according to my capabilities	10	10				90%	4.50	0.51	1
6	After finishing IQ, I started choosing the positive environmen t for studying	10	10				90%	4.50	0.51	1
7	My success in self- learning is	1	10	9			72%	3.60	0.59	8

	1		1				DOI: http	ps://doi.o:	rg/10.62754/joe	<u>.v4i2.6561</u>
	based on									
	my									
	technical									
	skills.									
	IQ changed	6	11	2		1	81%			
	my routine									
	learning									_
8	pattern into							4.05	0.94	7
	an active									
	one									
	IQ helped	6	11	2		1	81%			
	me to	U	11	2		1	0170			
	update my									
9	information							4.05	0.94	7
9								4.03	0.94	/
	about the									
	course									
	topics		4.0			4	a 10/			
	IQ helped	9	10			1	86%			
	me view									
	topics and									
	sources									
	based on									
	my own									
10	initiative as							4.30	0.92	2
10	very							7.50	0.72	
	important									
	for success									
	in college									
	and my									
	future									
	career.									
	IQ allowed	6	12	2			84%			
	me to									
	interact									
11	positively							4.20	0.61	4
	with the									
	educational									
	materials									
	IQ made	7	10	3			84%			
	the									
	scientific									
12	material							4.20	0.69	4
	more									
	interesting									
	micresung		1		L					

Table (2) shows the following:

The skills of (IQ helped me determine what I need from educational platforms, according to my capabilities) and (After finishing IQ, I started choosing the positive environment for studying) have got the highest degree.

The skills of (IQ helped me organize my priorities according to what I suits me) and (IQ helped me view topics and sources based on my own initiative as very important for success in college and my future career) have come second .

The skill of (IQ helped me set my own goals precisely) has come third.

The skills of (IQ allowed me to interact positively with the educational materials) and (IQ made the scientific material more interesting) have come fourth.

The skill of (IQ helped me to communicate with other learners in an educational group via social media) has come sixth.

The skill of (IQ helped me manage my time for learning effectively) has come seventh.

The skills of (IQ changed my routine learning pattern into an active one) and (IQ helped me to update my information about the course topics) have come eighth.

The Guidance and Control Skills of Self-learning

To what extent does the used digital enrichment platform (iQ) of the English language course (Skills for Success 1&2) develop the guidance and control skills of self-learning from the point of view of the female students at the applied college?

Table (3). The Mean, Standard Deviation, Rank, for the Answers of the Guidance and Control Skills of Self-Learning Learning of the Female Students

N o	Questions	Strongl y agree	agre e	Neutr al	Strongl y disagre e	disagre e	percentag e	Mea n	Std. Deviatio	Ran k
1	IQ made me focus on what I want to learn	8	11	0	0	1	86%	4.3	0.73	3
2	IQ made me rely on modern technology in studying English	9	10	1	0	0	88%	4.4	0.59	1
3	IQ motivated me to apply what I learned in real life situations	11	4	3	1	1	83%	4.1	1.18	4
4	IQ increased my cooperativ e activities	4	11	3	1	1	76%	3.8	1.00	5
5	IQ helped me develop my social relationshi ps with my colleagues	2	10	7	1	0	72%	3.6	0.88	6

N o	Questions	Strongl y agree	agre e	Neutr al	Strongl y disagre e	disagre e	percentag e	Mea n	Std. Deviatio n	Ran k
6	IQ increased my motivation towards learning	10	9	0	1	0	87%	4.3	0.93	2

Table (3) shows the following:

The skill of IQ made me rely on modern technology in studying English)has got the highest degree.

The skill of (IQ increased my motivation towards learning) has come second.

The skill of (IQ made me focus on what I want to learn) has come third.

The skill of (IQ motivated me to apply what I learned in real life situations) has come fourth.

The skill of (IQ increased my cooperative activities) has come fifth.

The skill of (IQ helped me develop my social relationships with my colleagues) has come the last.

Skills of using Learning Resource

To what extent does the used digital enrichment platform (iQ) of the English language course (Skills for Success 1&2) develop the skills of using learning resources of self-learning from the point of view of the female students at the applied college?

Table (4). The Mean, Standard Deviation, Rank, for the Answers of the Guidance and Control Skills of Self-Learning Learning of the Female Students

N o	Questions	Strongl y agree	agre e	Neutra 1	Strongl y disagre e	disagre e	percentag e	Mea n	Std. Deviatio n	Ran k
1	IQ made me realize the importanc e of having the ability to deal with electronic learning media	7	12	1	0	0	86%	4.3	0.57	2
2	IQ made me realize the importanc e of following	8	11	1	0	0	87%	4.3	0.58	1

		Strongl	agre	Neutra	Strongl	disagre	percentag	9017 7 40210	1g/ 10.02/34/ joe	1210001
N o	Questions	y agree	e	1	y disagre e	e	e	Mea n	Std. Deviatio n	Ran k
	education al platforms									
3	IQ helped me to have sufficient ability to learn through electronic networks and education al websites	8	7	5	0	0	83%	4.1	0.81	3
4	IQ helped me to have the desire to review multiple sources related to the topics I study	6	11	2	1	0	81%	4.0	0.94	4

Table (4) shows the following:

The skill of (IQ made me realize the importance of following educational platforms)has got the highest degree.

The skill of (IQ made me realize the importance of having the ability to deal with electronic learning media) has come second .

The skill of (IQ helped me to have sufficient ability to learn through electronic networks and educational websites) has come third.

The skill of (IQ helped me to have the desire to review multiple sources related to the topics I study) has come the last.

Self-Assessment Skill

To what extent does the used digital enrichment platform (iQ) of the English language course (Skills for Success 1&2) develop Self-assessment skills of self-learning from the point of view of the female students at the applied college?

Table 5). The Mean, Standard Deviation, Rank, for the Answers of the Guidance and Control Skills Of Self-Learning Learning of the Female Students

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N o	Questions	Strongl y agree	agre e	Neutr al	Strongl y disagre e	disagre e	percenta ge	Mea n	Std. Deviatio n	Ran k
1	IQ developed my ability to make good decisions	8	11	0	0	1	86%	4.3	0.57	2
2	IQ made me systematic in learning IQ makes me methodical.	9	10	1	0	0	88%	4.4	0.59	1
3	IQ increased my ability of understandin g and comprehensio n.	11	4	3	1	1	86%	4.3	0.65	2
4	IQ enhanced my confidence in myself and my abilities	4	11	3	1	1	88%	4.4	0.59	1
5	I have a good impression about using IQ as a means of increasing self-learning skills.	2	10	7	1	0	81%	4.0	0.75	3

Table(5) shows the following:

The skills of (IQ made me systematic in learning

IQ makes me methodical.) and (IQ enhanced my confidence in myself and my abilities) have got the highest degree.

The skills of (IQ developed my ability to make good decisions) and IQ increased my ability of understanding and comprehension) have come second .

The skill of (I have a good impression about using IQ as a means of increasing self-learning skills) has come the last.

Discussion

This study aimed to investigate the use of the digital enrichment (iQ) of the English language course (Skills for Success 1&2) in Al Qassim University Applied Colleges in developing self-learning skills. So , the Researcher asks 'has the digital enrichment (iQ) of the English language course (Skills for Success) helped students to develop self-learning skills from their point of view?. The experimental quantitative method in a quasi-experimental design was used in collecting data through the application of pre- and post-scale through the self-learning scale that was given to the group. The sample was comprised of twenty female students and the data obtained from the study was analysed through a one sample t-test .

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The study revealed a high-level effect of using the digital enrichment platform (iQ) on the development of female students' self-learning skills These results corroborate with (Jraiban, 2023) study which found that technology increased students' acquisition of self-learning skills.

Also, The current study has the same result as Al-Rashidi (2020) study which indicated that there is a statistically significant effect of teaching using e-learning on improving the level of self learning skills. This result is attributed to the fact that e-learning has become one of the basic learning sources in a student's life at the present time. E-learning provides students with many opportunities for self-learning and acquiring knowledge according to the student's desire, time and ability . E-learning sources are also characterized by quick access to knowledge.

Conclusion

From the findings of the study, it is concluded that employing the IQ platform in teaching English language contributes to improving learning among students. It works on acquiring self-learning skills. The researcher recommends for using digital enrichment platforms when teaching students. It provides various computerized sources of support and emphasize the crucial role of the learners in discussion and thinking in solving the different tasks. The researcher also recommends the necessity of integrating technology in education with the necessary tools and which will have an active role in developing self-learning skills, and increasing the students' ability to be independent in thinking and learning.

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References

Hadid, S. B. A. (2022). The effect of E-Learning in improving Self-Learning skills among gifted students at public schools in Jordan. Zenodo (CERN European Organization for Nuclear Research). https://doi.org/10.5281/zenodo.6568232

Aslan, B., & Seker, H. (2016). Interactive Response Systems (IRS) Socrative Application sample. Journal of Education and Learning, 6(1), 167. https://doi.org/10.5539/jel.v6n1p167

Al-Rashidi, Bandar Abdulrahman. (2020). The impact of e-learning on improving self-

learning skills among students of educational and communication technologies at Hail

University. IUG Journal of Educational & Psychological Studies, 28(1), 141.

Al-Sherbiny, Fawzy and Al-Tantawi, Afat. (2006) Metacognitive Strategies between Theory and Practice. Modern Library for Publishing and Distribution.

Al-Suroor, M. H. (2024). The Impact of Distance Education on the development of Self-Learning in light of the Corona Pandemic from the point of view of Secondary School Students in Mafraq Governorate in Jordan. Jordanian Educational Journal, 9(2), 25–45. https://doi.org/10.46515/jaes.v9i2.723

Al-Shamrani, Aliyah Ahmed Yahya Al-Hamoud. (2019). The Effect of Employing Digital

Learning on The Quality of The Educational Process and Improving Its Outputs.

Arab Journal of Educational and Psychological Sciences. (8), 145-169.

Animashaun, E. S., Familoni, B. T., & Onyebuchi, N. C. (2024). Implementing educational technology solutions for sustainable development in emerging markets. International Journal of Applied Research in Social Sciences, 6(6), 1158-1168.

Ahmadnejad, M., Rahimi, N. and Ghaslani, R. (2024). The Effect of Web 2.0 Technology on Language Achievement and Self-Regulated Learning of EFL Learners: A Case of

WhatsApp. Journal of English Language Teaching and Learning, 16(33), 46-73. doi: 10.22034/elt.2024.60600.2613

Baxter, J., Floyd, A., & Jewitt, K. (2022). Pandemic, a catalyst for change: Strategic planning for digital education in English secondary schools, before during and post Covid. British Educational Research Journal, 49(2), 329–351. https://doi.org/10.1002/berj.3845

Celeste, E. (2023). Digital constitutionalism. Routledge.

Eden, C. A., Chisom, O. N., & Adeniyi, I. S. (2024). Promoting digital literacy and social equity in education: lessons from successful initiatives. International Journal of Management & Entrepreneurship Research, 6(3), 687-696. https://doi.org/10.51594/ijmer.v6i3.880

Gkonou, C. (2021). Teacher-learner relationships. In The Routledge handbook of

ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online) https://ecohumanism.co.uk/joe/ecohumanism

DOI: https://doi.org/10.62754/joe.v4i2.6561

the psychology of language learning and teaching (275-284). Routledge.

Jaldemark, J. (2021). Formal and informal paths of lifelong learning: Hybrid distance

educational settings for the digital era. In M. Cleveland-Innes & D. R. Garrison

(Eds.), An introduction to distance education: Understanding teaching and learning

in a new era. 2nd Ed. (pp. 25-42). New York: Routledge.

Jraiban, T. F. A. (2023, August 9). Degree of Employing Distance Learning Technology by Faculty Members and its Role in Students' Acquisition of Self-Learning Skills. https://doi.org/10.1109/icit58056.2023.10225979

Kusyk, M. (2017). The Development of Complexity, Accuracy and Fluency in L2 Written

Production through Informal Participation in Online Activities. CALICO Journal,

34(1), 75–96. https://doi.org/10.1558/cj.29513

Koscheck, S., Christ, J., Ohly, H., & Martin, A. (2022). Digitale Weiterbildung in Zeiten der Coronapandemie: Ergebnisse der wbmonitor-Umfrage 2021. Bundesinstitut für Berufsbildung.

Mutiaraningrum, I., & Nugroho, A. (2021). Smartphone-based mobile assisted language learning application in higher vocational education in Indonesia. JEES (Journal of English Educators Society), 6(1). https://doi.org/10.21070/jees.v6i1.793

Mansour, E. (2021). Utilization of Online Learning Platforms by LIS Arab Faculty Members during the Coronavirus Outbreak. Journal of Library & Information Services in Distance Learning, 15(1), 18–40. https://doi.org/10.1080/1533290x.2021.1896619

Moore, E.(2021). Inclusive epistemologies and practices of out-of-school English

learning. Learning English Out of School: An Inclusive Approach to Research and Action, (7), P.p. 7-27

Mozelius, P., Cleveland-Innes, M., Lindqvist, M. H., & Jaldemark, J. (2024). Critical Aspects of a Higher Education Reform for Continuous Lifelong Learning Opportunities in a Digital Era. Electronic Journal of Knowledge Management, 22(1), 26-39.

Noughabi, M. A., & Ghasemi, A. (2024). Informal digital learning of English and EFL learners' willingness to communicate: investigating the mediating role of L2 grit. Journal of Multilingual and Multicultural Development, 1–16. https://doi.org/10.1080/01434632.2024.2351087

Lee, J. S. (2019). Quantity and diversity of informal digital learning of English.. Language Learning & Technology, 23(1), 114–126. https://doi.org/10125/44675

Lee, J. S., & Lee, K. (2020). The role of informal digital learning of English and L2 motivational self system in foreign language enjoyment. British Journal of Educational Technology, 52(1), 358–373. https://doi.org/10.1111/bjet.12955

Rott, K. J., & Schmidt-Hertha, B. (2024). Transforming adult learning in the digital age: exploring environmental, content, and technological changes. International Journal of Lifelong Education, 43(4), 319–323. https://doi.org/10.1080/02601370.2024.2367395

Toffoli, D. (2020). Informal learning and institution-wide language provision. Springer Nature.

Phuoc, K. H. (2023). Lifelong learning in the digital age. In Journal of Southeast Asian Education (Vols. 1–Special Issue, pp. 1–12) [Journal-article]. https://www.seameo.org

Pinto, M., & Leite, C. (2020). Digital technologies in support of students learning in Higher

Education: literature review. Digital education review, (37), 343-360. Schuetze, H. G., & Slowey, M. (2020). Higher education in the twenty-first century: New

frontiers—old barriers. Inequality, Innovation and Reform in Higher Education: Challenges of Migration and Ageing Populations, 313–323.

Schrape, J.-F. (2021). Platformization, pluralization, synthetization. Public communication in the digital age. SOI Discussion Paper 2021-02 [Report]. https://www.sowi.uni-stuttgart.de/abteilungen/oi/publikationen

Schmid, R., & Petko, D. (2019). Does the use of educational technology in personalized learning environments correlate with self-reported digital skills and beliefs of secondary-school students? Computers & education, 136, 75–86.

Sauro, S., & Zourou, K. (2019). What are the digital wilds? Language Learning & Technology, 23(1), 1–7. https://doi.org/10125/446661498

Taha, H. & Emran, K. (2009). Self-Cooperative Electronic Learning Methods: Contemporary Educational Visions. Dar Alelmwa Aleman.

UNESCO IITE and Shanghai Open University. (2022). Analytical report on the use of advanced ICT/AI for digital transformation of education

Varghese, N. V., & Mandal, S. (2020). Teaching-learning and new technologies in higher education: An introduction (pp. 1-15). Springer Singapore.

Vieira, D. (2020). Lifelong learning and its importance in achieving the sustainable development goals. Quality Education, 535-544.