On the Relationship between Digital Literacy and Dynamic Assessment of Educational strategies

Abstract
Given the emergence of innovative devices necessitates language practitioners to delve into their academic settings This study investigated the role of dynamic assessment and digital literacy in education. To that end, three intact classes consisting of ninety-six Iranian EFL learners participated in the study. The learners received instructions on utilizing appropriate digital tools based on educational strategies within the classroom. The study established a connection between digital literacy employed during dynamic assessment episodes, as described by Brown (2006), and the interactive model of reading comprehension proposed by Grabe (2008). To verify a dynamic assessment episodes model through the research project, the researchers chose a teacher who served as a facilitator for a thorough assessment of each component. After the treatment period, all participants were assessed based on their performance during three months. The results of the study showed that the group exhibited improved performance after the treatment, as indicated by significant differences between their pretest and posttest scores. All the same, an effective digital strategy is essential for creating an optimal education system in the context of the ongoing pandemic. Finally, the findings highlight the importance of addressing digital literacy in the language education and administrating dynamic assessment in education.

Keywords: Digital literacy, Dynamic assessment, Reading comprehension skill

1. Introduction

Digital Literacy (DL) and Dynamic Assessment (DA) are crucial within the field of social studies. Taking this, numerous definitions have been proposed to capture the essence of the concepts, multisensory approaches involved in the digital media. The multisensory approaches were developed into a "TikTok entitled as a video-sharing and creation platform in Beijing" (Storto, 2021, p. 138). Among these definitions, Makhachashvili and Semenist (2021) have identified required attention to teacher perception and beliefs in EFL assessment innovation. Moreover, Inbar-Lourie and Levi (2020) highlighted subjects such as information literacy, media literacy, and technological proficiency in the context of language learning. These intersecting activities have brought attention to the intricate, intersecting, conflicting, and not fully understood connection between DL innovation as applied in design and innovation within the broader scope of innovation studies.

In a study conducted by Yousofi, Velayati, and Ebadi in 2024, they explored the use of group DA as a means to improve the grammar skills of high school students in Iran. The research was published in the Journal of English Language Teaching and Learning. The study aimed to investigate the impact of group DA on students' grammar ability. While significant research has been conducted in the domain of DL as evident from studies conducted by Astiandani and Anam (2021), Hashemian and Fadaei (2013), and Norton (2013), none of these studies have explored potential methods to enhance the DL capabilities of English as EFL learners. The available literature on DL in the context of testing and assessment is relatively

limited, with only a few studies conducted by Inbar-Lourie and Levi (2020), and Petersen et al. (2020). Moreover, studies have been developed to highlight the contrasting approaches in analyzing contemporary DL paradigms between instructional practices and the requirements of academic teaching.

In the same manner, the notion of contemporary literacies pertaining to everyday learning and practices in EFL is primarily limited to the realm of reading comprehension interaction and education. Several researchers have conducted assessments to demonstrate the DL of EFL learners. Lukitasari et al. (2022) have examined the efficacy of digital tools on EFL learners' educational achievements, specifically focusing on their reading comprehension skills and knowledge. Previous investigations have also indicated that these skills have been adopted from other researchers without undergoing thorough validation testing in terms of their conceptual and visual effectiveness. Additionally, DL involves the ability to access and navigate the digital world using various skills and technologies, such as Google Chrome, WhatsApp, Telegram, Webinar, Adobe Connect, and Big Blue Button (Kao, 2020; LIopis Nebot, Esteve-Mon & Segura, 2021).

2. Literature Review

In light of the advancements in technology, there has been a shift towards exploring the subject of DigEduLit model (Martin & Grudziecki, 2006). This model is often seen as a designated physical space where students engage in standardized educational activities under supervision, following a routine (Katz, 2007). This research contributes to existing literature by demonstrating how new digital networks have transformed the dynamics within a conventional classroom, isolating more traditional teaching methods. Within this context, three types of information essential for real-world knowledge creation have been identified: semantic-association information, syntactic information, and symbol-sound information (Pearson, 1976). Different scholars have explored DL using different resources to encode and access texts, facilitating meaning negotiation in socially recognizable ways (Andrade et al., 2019; Martin, 2005). Importantly, Mirra, Morrel, and Filipiak (2018) have supported this strategy, wherein students utilize a range of digital media to practice and extract useful tools to improve their performance in assessments. These tools encompass "digital competencies," which primarily involve cooperation, social interaction, and the subsequent aspects of collaboration. (Makhachashvili & Semenist, 2021; Mellati & Khademi, 2018).

2.1. Salience of Digital Literacy

A similar discovery has also been documented, highlighting the importance of DL and its role in discussions about evaluating and addressing it (Murray & Perez, 2014, p. 86). This finding is sometimes referred to as the knowledge of the expanding value of the DL paradox, which encompasses the combination of computer information media or digital compatibility with literacy. However, students faced a challenge with DL as they were deeply engrossed in traditional paper-based assessments and failed to recognize the connection between DL and psycholinguistic aspects in education, especially among EFL learners. In other words, this issue manifests itself through real problems and has significant consequences for students.

2.2. Digital Literacy Model

In addition to a theoretical perspective and framework, various definitions have been proposed to assess the performance of students in education. For instance, Spante et al. (2018) defined DL as an individual's efforts to adapt their lifestyle, learning, and work to a digital environment, and to evaluate their digital skills through DA. Building upon this model, Amaro et al. (2017)

and Shabani (2018) further expanded on the theoretical framework of DA, which holds significant relevance in this particular study.

Given the significance of DL and reading comprehension abilities in the EFL setting, this research endeavors to explore the views of EFL teachers regarding their students' reading skills. Prior studies have not investigated the role of learners' DL in the Iranian context within language institutes. As a result, this study aligns with previous investigations on these factors, emphasizing the influence of teacher assessment, specifically focusing on DL. Taking inspiration from the study conducted by Panadero et al. (2016) and Falloon (2020), which discovered that online assessment using Web 2.0 tools significantly enhanced the skills of EFL learners in Iran, this research seeks to validate these findings and expand them to include DL. Furthermore, building on the research carried out by Dinther et al. (2015), which demonstrated that electronic-based assessment methods can greatly improve EFL learners' reading abilities, this study further explores the potential advantages of utilizing such an approach. According to Andrade et al. (2019), DL involves the utilization of digital technologies to encode and access texts, enabling the creation, communication, and negotiation of meanings in socially recognizable manners. Additionally, Martin (2005) suggests that DL encompass a broad perspective that involves the capacity of EFL learners to employ digital tools to navigate, control, manage, and integrate digital resources. This enables the production of innovative literacies through collaboration with others, reflecting the specific contexts of their lives. On a similar note, numerous researchers (Fulcher, 2012; Pill & Harding, 2013; Scarino, 2013; Stiggins & Chappius, 2005) argue for the crucial role between the two categories, i.e., DL and Da in education. Conversely, some researchers believe that learners perceive English as a challenging language to use in their daily lives (Gupta, Seetharaman & Maddulety, 2020; Scriven, 1967). These researchers aim to trace the origins, purposes, and contexts of the definitions that have shaped and been utilized in this area of study.

When discussing the concept of DL, Gillan and Barton (2010) present it as an intriguing and captivating idea, encompassing both its definition and its practical applications. They emphasize the remarkable opportunities that digital tools offer for global collaboration among users of technology. Mirra et al. (2018) introduce a significant article that focuses on the impact of "media literacy word moves to production element," which aims to encourage learners to actively engage with media and utilize media tools for further learning. These tools encompass various digital skills, including collaboration, social interaction, and other aspects of cooperation.

Furthermore, this study also places great importance on assessing DL, which is considered the guiding principle of the research. This assessment serves as a means of effectively communicating the significance of the conducted research to different readers, including academic assessors, teachers, and individuals interested in the development of literacy within the school context. Thus, two research questions guided this study:

RQ1: Is there any significant relationship between DL and DA at different educational levels?

RQ1: Can DL help to the improvement of Iranian EFL learners' reading comprehension skill through DA across three different time periods?

3. Methodology

3.1. Participants

These participants were chosen from a pool of 174 students studying at the Not-for-Profit University of Mohhades Nouri (NPUMN) in Mazandaran, Iran. After piloting, the sample of this study incorporated 96 Iranian male and female learners. They were within the age range of

18-28. Students had already been assigned to three separate classes according to the education schedule of the university, each consisting 32 participants. These classes were selected as two experimental groups (i.e., DA of DL) and one control group (i.e., without treatment group). It was crucial to mention that all of the selected students were at the pre-intermediate level of English proficiency, as determined by their scores on the Oxford English Reading Passage assessment (Pre-intermediate, Lee & Gundersen's Select Readings, 2011). All of the participants were Iranian EFL learners with a Persian background, having a general 3-credit course to pass as a curriculum syllabus.

All of them were nonnative speakers of English, but English was their foreign language. Thus, a decision was made to only homogenize them in terms of reading comprehension literacy. Accordingly, ninety-six students, who attained scores well within two standard deviations below or above the mean scores on the first 10 English reading size test, were selected as the participants.

3.2. Design

The ongoing investigation utilized a combination of mixed-method research design. The main objective of the study was to understand how the variables being studied are related to each other. To accomplish this, participants were randomly placed into groups to receive treatment. A key feature that sets crossover designs apart from other types of experiments is that the same group of participants were used throughout the study. Each student's response to the treatment they received was assessed and recorded. Essentially, the goal of this mixed-method research design was to determine the nature and strength of the connection between the two variables.

3.3. Instruments and Materials

The research made use of materials from the Reading Series (Lee & Gundersen's Select Readings, 2011) published by TOEIC®-style Final, Oxford University Press. These materials included chosen readings suitable for intermediate level learners and were employed to evaluate the language proficiency of the participants. Furthermore, the Select Reading (Extra Assessment) test was utilized to measure the learners' accomplishments and ensure their uniformity. The test consisted of 45 multiple-choice questions, with 12 passage reading questions, 6 lexicon questions, and 3 pronoun questions distributed among 3 passages. Participants had 45 minutes to answer these questions. The Eurostat's Digital Skills Indicator was also identified as the most suitable tool to adapt for assessing DL, as it met the minimum requirements. This study utilized a standardized measurement, consisting of 181 items, which was developed and validated by Khlaisang and Koraneekij (2019). The measurement focused on three crucial digital skills for the 21st century: information literacy (49 items), media literacy (63 items), and information and communication technology literacy (69 items). Confirmatory factor analysis was employed to validate the questionnaire, and its reliability was demonstrated through Cronbach's alpha coefficient.

3.3.1. First strategy: Designing the DigEduLit Model

DigEduLit Model strategies were developed for a specific group of students based on their "knowledge and skills in psycholinguistic models" (Anderson, 1984, p. 186 as cited in Chastain, 1988). These strategies were then compared to a skills model. To understand the role of DA on DL practices, researchers needed to compare the perspectives and practices of students proficient and non-proficient in assessment. Thus, at the start of the study, a group of 96 EFL learners (selected from a larger sample) studying Pre-Select Reading books were chosen. The researchers then administered a DL Eurostat Skills to these students over 10

sessions. The major difference between less proficient and highly proficient students was the approach to completing reading tasks rather than just focusing on planning and preparing for the main iChecker self-assessment tool in terms of DL (Cohen & Cowen, 2008).

3.3.2. Second strategy: Selecting the sample of mediators

In order to validate the DigEduLit model created during the research project, it was crucial to select a teacher to act as a guide for a comprehensive evaluation of each element. The teacher's responsibility was to assess the importance of the tasks and the DL characteristics involved in them. The purpose of this selection process was to eliminate any errors or irrelevant questions and to adjust or correct paragraphs as necessary Bhatt (2017). To integrate the Zone of Proximal Development (ZPD) concept into digital reading literacy and enable feedback and interventions, the researchers developed a framework that serves as the foundation for evaluating the evaluation process. Additionally, a standardized reading comprehension test (at the pre-intermediate level) was used as a benchmark for the teacher's involvement in two DL management scenarios. This test provided guidelines for various sections of the reading passage and included multiple examples of this particular reading style (Buckingham, 2007).

3.4. Data Collection Procedure

In order to obtain a more accurate assessment of students' performance on the two reading tasks over three different time periods, the researcher calculated their reading scores separately and conducted t-tests to compare them. aiming to enhance their effectiveness in digital contexts. At the beginning (Month 1 [T1]), Month 2 (T2] and the end (Month 3 [T3]) of the semester term of the academic year, students were tested on their English decoding, vocabulary, and word awareness and reading comprehension with paper-and-pencil tasks and on EDU with a self-assessment reading task with reading times being compared on passages with unknown versus known words and passages with the pre-reading text (Guikema & Menke, 2014),

For this study, the researcher initially employed the Oxford Placement Test (Allan, 2004) to select a total of 175 pre-intermediate-level Iranian EFL learners from a private language institute in Nur, Iran. The participants consisted of 115 female learners and 60 male learners, divided into four intact reading comprehension classes. These classes were categorized as follows: a) male experimental group (25 learners), b) female experimental group (71 learners), c) male control group (35 learners), and d) female control group (44 learners). The researcher randomly assigned the aforementioned reading comprehension classes to the male and female experimental and control groups.

Secondly, the researcher utilized the Big Blue Button learning management system and Google Forms to administer the reading comprehension pretest to the experimental groups. In contrast, the control groups in the in-person classes were given a paper-and-pencil version of the test. The participants were given 50 minutes to answer the questions on this test.

Thirdly, the experimental groups received the integrated DL and DA treatment during twelve online sessions over a span of six weeks. These sessions lasted for 90 minutes and occurred twice a week. Specifically, the researcher divided the twelve sessions into three categories: four sessions based on the Learning-Management-System, four sessions based on WhatsApp, and four sessions based on Telegram. Throughout all twelve sessions, the learners attended Big Blue Button sessions.

In the first session of the Learning-Management-System-based sessions, the researcher spent 20 minutes using the microphone, camera, and screen-sharing features of the system to inform the learners about various aspects of Big Blue Button learning management system and Google Forms. Following this, the researcher implemented a test-teach-retest pattern as part of the treatment. Firstly, the learners were given a 150-word reading comprehension text through

the file-sharing feature, and they were asked to read it and answer comprehension questions using Google Forms within 20 minutes. Secondly, the researcher provided scaffolding techniques, based on the evaluation of the EFL learners' ZPDs, using the camera feature and whiteboard feature to offer negotiated assistance for 30 minutes. Finally, the learners were given the same reading comprehension text again and asked to read it and answer a different set of comprehension questions within 20 minutes.

4. Results

4.1. Results for the Reading Ability Test

To address the research questions, we utilized Mauchly's Test of Sphericity. We included DL of learners, based on educational strategies, as predictors in a model to determine L2 learners' reading comprehension scores. These scores were the main focus. Following the recommendation of Jakeman and McDowell (2008), we initially conducted Mauchly's Test of Sphericity to investigate if the relationship between DL changed significantly at different educational levels in Iranian EFL learners' reading comprehension scores. Pre-reading tests were administered at the beginning and end of the study to evaluate the learners' reading ability. Posttest comprehension scores showed variations between the two groups (ME, M = 14.56, SD = 2.56; MC, M = 15.68, SD = 1.60). Furthermore, an analysis of covariance (ANCOVA) was carried out to assess the impact of two interventions on enhancing the comprehension skills of male participants. The pretest scores of male participants' comprehension skill was used as a covariate in this analysis. The results of the analysis can be found in Table 10.

Table 1.

Assessment of ANCOVA for Male Group Comparison

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	97.456[b]	2	48.728	16.709	.000	.370
Intercept	91.653	1	91.653	31.428	.000	.355
pretest	78.976	1	78.976	27.081	.000	.322
group	1.974	1	1.974	.677	.414	.012
Error	166.227	57	2.916			
Total	14156.500	60				
Corrected Total	263.683	59				

a. gender = male

b. R Squared = .370 (Adjusted R Squared = .347)

The results of the performance outcomes for all participants in the experimental group are depicted in Table 1 over three distinct time periods. This analysis will thoroughly explore the statistical measures related to the experimental group, offering valuable insights and aiding in the comprehension of the experimental data. Through the use of clear and straightforward language, our goal is to improve understanding and provide a fresh perspective on the topic at hand.

4.2. Results for Pretest Scores for Experimental Groups

The results of the Mauchly's Test of Sphericity for DL are shown in Table 2. The findings indicate that the Mauchly's W values for the tests were .981 and 1.817 for Chi-square. Additionally, the table also presents the hypotheses and characteristics of Mauchly Sphericity. The p-values obtained from the Mauchly's Test of Sphericity for the scores in Table 2 were higher than the critical value of .05, suggesting that the distribution of scores demonstrated normality.

Table 2.
Overview of Statistical Measures for Experimental Groups

step	Mean	Std. Deviation	N
Pretest- exp	12.6265	2.3162	96
Treatment-exp	13.3750	2.6046	96
posttest -exp	14.3542	2.5658	96

The probability value in Table 2 confirms that the assumption of similarity in variance between each measurement time pair is accepted. The Tests of Within-Subjects Effects in RM analysis were used for this study, as indicated in the table. The probability value for DL suggests that students mostly benefited from the repeated time pair and established educational strategies. The values of Mauchly's W (.981) and approximate chi-square (1.817) along with the estimated marginal means at a certain level support this finding. The tests in Table 2 also show that most students preferred to use 'digital technology' (1.817). Around 96 students were randomly selected from four strata, including young and old individuals (18-28 years), who were both more active and less active in DL.

4.2.1. Tests of Within-Subjects Effects

The data regarding the impact of the DL on individuals is presented in Table 2. The statistical significance obtained from this analysis confirms that the assumption of equal variance between each set of measurements is valid. These findings are crucial for utilizing the "In-subject Effect Testing" table for further analysis. Table 2 indicates that there was no significant improvement in the reading comprehension skills of EFL learners after being taught using traditional methods. The average score before the teaching was 12.62 with a standard deviation of 2.31, while the average score after was 13.37 with a standard deviation of 2.60. These results suggest that there was no substantial enhancement in reading comprehension. Furthermore, a paired samples t-test was conducted on the control group with high self-efficacy to compare their scores before and after the teaching. The resulting p-value was .488, which is above the significance level of .05. Therefore, it can be concluded that there was no notable improvement in the reading comprehension skills of high self-efficacious learners in the control group. The mean difference was -.38, standard deviation was 3.16, standard error mean was .481, t-value was 11.23, and the degrees of freedom were 19. In other words, the control group, which received traditional instruction, did not show significant progress in their reading comprehension skills. Table 18 also indicates variations in comprehension scores of the experimental group across three time periods: pretest (M=12.62, SD=2.31), treatment (M=13.37, SD=2.60), and posttest (M=14.35, SD=2.56). To further evaluate the effectiveness of interventions aimed at improving participants' comprehension, a repeated measure analysis was conducted, with results displayed in Table 3

4.3. Results for First and Second Research Questions

The results from Table 3 clearly show a significant difference in reading comprehension scores across three different time periods in the experimental group. Statistical analysis indicates a substantial variance, with an F-value of 13.33 and a p-value of .000 ($p < .05$). The effect size, as denoted by the partial eta squared value of .123, further reinforces the belief that utilizing DA reading comprehension language learning can greatly improve comprehension skills over these time periods, thus validating the initial hypothesis

Table 3.
Evaluation of Repeated Measurement Analysis for all Participants

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
factor1	Sphericity Assumed	139.465	2	69.733	13.335	.000	.123
	Greenhouse-Geisser	139.465	1.484	93.974	13.335	.000	.123
	Huynh-Feldt	139.465	1.502	92.846	13.335	.000	.123
	Lower-bound	139.465	1.000	139.465	13.335	.000	.123
Error(factor1)	Sphericity Assumed	993.535	190	5.229			
	Greenhouse-Geisser	993.535	140.987	7.047			
	Huynh-Feldt	993.535	142.701	6.962			
	Lower-bound	993.535	95.000	10.458			

In contrast, Table 3 reveals no significant differentiation in the performances of the groups (F (1,172) = 0.447, p = .505 >.05, partial eta squared = .003). Consequently, it was determined that the use of DA reading comprehension language learning did not result in a notable enhancement in the participants' comprehension skills.

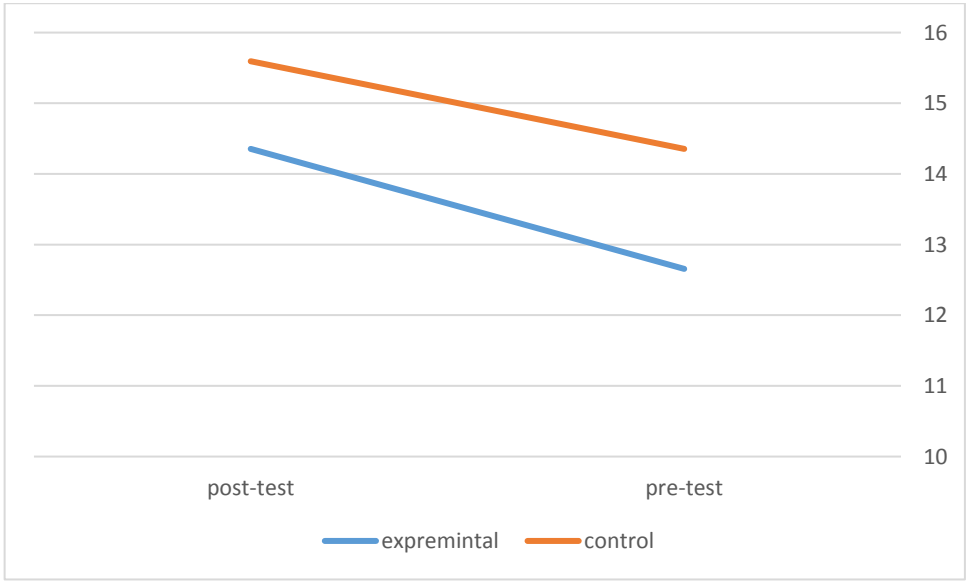

Figure 1: *Comparing the Average Scores Before and After the Test Among Participants*

The researchers conducted an analysis in the table below, with a significance level of five percent ($\alpha = 0.05$) for all tests. To begin the analysis, various Multivariate Tests were performed and listed in the table along with their corresponding names and statistics.

Table 4.
Statistics on Coefficients Analyzing Pretest and Posttest Scores

Correlation	Unstandardized Coefficients		Standardized Coefficients			95% Confidence Interval	
	B	Std. Error	Beta			Lower	Upper
Constant	5.323	1.124		4.734	<.001	3.090	7.555
Pretest	.714	.087	.644	8.165	<.001	.540	.887

Recent studies have indicated that having strong DL skills can have a positive impact on academic performance, particularly in the area of reading comprehension. For English as a Foreign Language (EFL) students, being able to effectively utilize digital resources can lead to the adoption of various learning strategies that can improve their reading comprehension abilities. These strategies may involve engaging in online reading exercises, using interactive multimedia materials, and utilizing digital tools to enhance vocabulary and analyze texts. It is worth noting that the connection between DL and reading comprehension scores can be affected by multiple factors, such as the quality of available digital resources, the level of instructional support provided, and the unique characteristics of individual learners. To gain a better understanding of how DL influences reading comprehension among Iranian EFL students, further research specific to this population is necessary.

5. Discussion

The purpose of this research was to investigate a method for identifying challenges that happen during the performance to help to evaluate the reading skills of Iranian EFL learners. One key question that remains unanswered is whether improving EFL DL through DA is linked to psycholinguistic factors. Teachers are curious about how the shift from functional to positional levels occurs, a concept not clearly defined in the Garret model (Garret, 1990). The Garret mental model addresses this by incorporating conceptual structure and inferential processes, connecting functional level representation to positional level representation by assigning frame elements to the terminal string. The study revealed that the selected group showed improvement compared to the initial stage (pretest) in various stages. A major finding was the emphasis on function over forms used in the samples and the importance of understanding key instructions through a quantitative analysis. Furthermore, the research delves into an internal factor that provides a more appropriate form of assessment compared to Anderson's skills model (1986). Similarly, the study assesses the validity of its results in light of current literature on the performance of EFL learners in a digital learning setting.

According to the results, one potential explanation is that the digital evaluation may not produce satisfactory results for teachers assessing reading comprehension strategies. This could be due to the anxiety and stress experienced during the final assessment. Although this form of evaluation allows EFL learners to give feedback and engage in interactive educational activities, it falls short of meeting the expectations of EFL teachers in terms of achieving desirable outcomes. This interpretation is backed by a 2006 report from the European Commission, which proposes that involving an EFL teacher as a mediator could be advantageous in helping students navigate classroom assessments. This method would enable teachers to effectively utilize digital tools, interact with technology, and successfully achieve their goals. The findings of the study align with those of McDougall, Readman, and Wilkinson

(2018), who highlight the positive impact of digital learning on EFL learners' reading comprehension abilities, ultimately enhancing educational quality.

The research findings are in line with Esfandiari's previous study in 2020, which emphasized the increasing integration of advanced digital technologies, including DL, in the field of applied linguistics. This integration has enabled language instructors to deliver more impactful lessons to language learners. Based on the psycholinguistic model, the process of DL can be categorized into seven distinct reading processes: integrated, non-sequential skills, meaning centrality, alternative, activity, inexactness, and primacy of function over forms. These processes are utilized for selecting appropriate mediators. The significance of this model for DL lies in its focus on language and is influenced by the literacy levels of instructors and instructional tools. However, despite numerous studies on DL, a clear theoretical foundation is still lacking.

Researchers like Dardanou and Kofoed (2019) and Spante et al. (2018) have highlighted the importance of merging various DL into a cohesive principle and evaluating them through quantitative studies. This study builds upon the existing theoretical model, contributing to the establishment of a framework for the DL discourse. Moreover, a study by Readman and Wilkinson (2018) explored changes in DL and observed differences in performance between participants based on the psycholinguistic model, skills model, and SQ3R process.

6. Conclusion.

To address the findings of the study, the initial question raised was whether integrating DL instruction and DA could lead to an improvement in the reading comprehension abilities of Iranian EFL learners. Several implications for educational practice follow from this study. DL can provide unique insights into EFL reading comprehension improvement. These insights can inform our understanding of why some learners with sufficient lexical skills nevertheless show ample reading comprehension skills. As there are large individual differences in L2 learners (Mehri Kamrood et al., 2021; Yousofi, Velayati & Ebadi, 2024), insight into speaking and listening skills may help teacher practices to improve reading comprehension drawbacks. Future studies will be conducted at the same site to further explore the impact of DL on improving other skills among EFL learners. This research adds to the development of a theoretical framework for the discourse on digital age by expanding upon the existing model. In conclusion, this study highlights the importance of utilizing DA as an educational strategy to assess the DL skills of Iranian EFL learners. The results indicate that digital education has led to improved mean scores among learners, suggesting the potential effectiveness of online platforms for educational purposes. However, it is important for institutions to have a well-established digital framework to ensure effective assessment.

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