Open Access | Original Research
Journal of Intercultural Communication, 24(2), 2024 | PP: 70– 81
https://doi.org/10.36923/jicc.v24i2.562

Revolutionizing EFL Instruction: Jordanian Teachers' Perspectives on Interactive Whiteboards for Word Identification Enhancement

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Article History:

Received: 14-09-2023
Accepted: 21-01-2024
Publication: 10-06-2024

Cite this article as:

Alhumsi, M., H. (2024). Revolutionizing EFL Instruction: Jordanian Teachers' Perspectives on Interactive Whiteboards for Word Identification Enhancement. *Journal of Intercultural Communication*, *24*(2), 70–81. doi.org/10.36923/jicc.v24i2.562

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Abstract: This study investigates Jordanian EFL teachers' perspectives on the impact of Interactive Whiteboard (IWB) technology on word identification enhancement. Drawing on the theory of Multimedia Learning, the research aims to address a gap in the literature regarding EFL educators' perceptions of using IWBs to improve word identification skills. A cross-sectional survey was administered to 124 Jordanian EFL teachers, and data were analyzed using descriptive statistics, paired t-tests, and one-way ANOVA. The findings reveal positive attitudes among Jordanian EFL teachers towards the efficacy of IWB technology in enhancing word identification. Participants overwhelmingly support the favorable use of IWBs and recognize their potential to enhance word identification skills. Importantly, no significant differences were found across demographic variables, suggesting a consistent recognition of IWB efficacy irrespective of gender, age, academic degree, or years of experience. The results underscore the importance of integrating IWB technology into EFL classrooms and highlight the need for further exploration of pedagogical approaches to maximize its benefits. This study contributes to the literature by providing insights into the perceptions of Jordanian EFL teachers regarding IWB technology and its role in word identification enhancement. It advocates for the continued utilization and exploration of IWB technology to enhance language teaching and learning practices.

Keywords: Interactive Whiteboard (IWB), Jordanian EFL Teachers; Multimedia Learning Theory; Perspectives; Word Identification

1. Introduction

Deploying instructional technologies effectively in EFL classrooms has been demonstrated to be beneficial. Research indicates that instructional technologies play a vital role in supporting both students and educators in learning and teaching various subjects, including languages (Ishtaiwa & Shana, 2011; Zhang, 2022). The interactive whiteboard (IWB), among these technologies, is recognized as a large touch-sensitive board that, in conjunction with a computer and a digital projector, displays images on its screen (Erdener, 2021; Smith et al., 2005). When used judiciously, the IWB is expected to enhance learners' motivation and engagement within classrooms (Kühl & Wohninsland, 2022), given that both learners and instructors can control and manipulate programs via its interactive screen (Guzmán et al., 2013), particularly within EFL settings. Therefore, integrating the IWB into EFL classrooms is feasible.

Today, technology serves as a catalyst for fostering learning engagement, encouraging efficient interaction in conducive environments that include instructors and their students. In this educational milieu, innovative technologies can be leveraged to enhance various language skills (Wu & Marek, 2018), opening up more avenues for education, including the use of the Internet, IWBs, and computers (Hanimoglu, 2018; Parr & Ward, 2011). For example, educators can utilize instructional technologies like IWBs in numerous elementary classrooms to enhance language skills such as reading (Alhumsi, 2017; Capodieci et al., 2020; Slavin et al., 2009), word identification and decoding (Coleman-Martin et al., 2005), and phonological awareness and word reading (Hofmann, 2021; Heimann et al., 1995). In the context of this paper, the skill of word identification can be effectively taught using IWBs, capitalizing on their significant features.

It's worth noting that Ehri (2005, 2014) defines word identification as the process by which emergent readers directly and automatically recognize words as single units, without the need for analysis. This skill is crucial for young learners' reading acquisition, with Aarnoutse et al. (2005) emphasizing it as one of the essential components of the reading process, indicating children's awareness of the alphabetic principle or phoneme–grapheme relations. However, EFL learners often struggle with word identification within English contexts, with Fender (2003) noting that reliance on native language skills can hinder EFL word recognition. Consequently, Arab EFL

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young learners face challenges in EFL word identification acquisition, leading to slow and improper strategies that impede reading accuracy (Torgesen et al., 2001). Adams (1994) also warns that failure to develop word recognition strategies puts students at risk of academic failure, affecting fluency and comprehension.

Research indicates a lack of studies on the influence of IWB use on student engagement and literacy teaching across various skills (Alhumsi, 2021; Smith et al., 2005). Additionally, few studies have explored EFL teachers' perceptions of using IWBs to enhance word identification within EFL contexts (Alhumsi, 2017). Beauchamp and Kennewell (2013) highlight the scarcity of studies on how primary school teachers integrate IWBs as digital tools with pedagogy and relevant learning activities. This underscores the need for adequate professional development to effectively utilize IWBs in digital learning (Al-Rabaani, 2018; Luo et al., 2023). To the best of the researcher's knowledge, this study represents one of the few investigations into Jordanian EFL teachers' perceptions of IWBs' impact on word identification enhancement. Consequently, IWBs can serve as practical educational tools to assess teachers' and learners' ability to enhance word identification among multiple language skills. Thus, this paper aims to explore Jordanian EFL teachers' perspectives on word identification enhancement through IWB technology.

2. Literature Review

2.1. The Contribution of IWB to the Learning Process

The IWB has been characterized as one of the instructional technology instruments and has been extensively applied in the learning environment (Hendawi & Nosair, 2020). For example, the connection between IWB technology and learning to read is that such technology has been emphatically employed as an educational instrument in the area of literacy teaching, including phonics and spelling in elementary schools (Shenton & Pagett, 2007). Interestingly, Smith et al. (2005, p.91) defined the IWBs as “large, touch-sensitive boards, which control a computer connected to a digital projector”.

In EFL educational contexts, the IWB has a noticeable influence on learning a foreign language (Kühl & Wohninsland, 2022). To highlight the impact of the IWB on foreign language school classes, Gray et al. (2005) concluded that what makes learners concentrate more on structures like reflexive pronouns, negative statements, and different forms of grammatical categories such as nouns and adjectives is the application of visual components that include animation in addition to the color features. This implies that the IWB can be a useful tool applied in EFL school classes.

In Jordanian settings, adopting the use of the IWB as an instructional instrument, Alhumsi (2017) examined the impact of the skill of phonemic segmentation on word recognition. In his empirical study, pre-tests and post-tests were presented to 41 young learners to check their skills in recognizing words. The students were divided into two groups; the experimental group received instructions through employing the IWB, while the control group received instructions using the chalkboard, the traditional instrument. Concerning the results of the scores of the word recognition test, a significant difference has been identified between the two groups in favor of the experimental one. Moreover, another study examined teachers' views of the use of the IWB about its educational characteristics (Jwaifell & Gasaymeh, 2013). The researchers found that EFL teachers should deliberately consider having workshops on training on how to integrate the IWB in school classes.

In short, there is a lack of studies that examine the effect of using the IWB on teachers' perspectives on the skill of word identification. For example, a few studies have also addressed teaching literacy and learners' engagement (Smith et al., 2005) and teachers' perceptions of phonological awareness skills (Alshaboul, 2018). However, these studies did not address teachers' perspectives on word identification enhancement via IWB technology. Hence, this paper aims to examine Jordanian EFL teachers' perspectives on the impact of the IWB on enhancing word identification skills.

2.2. Word Identification

Concerning vocabulary development, Ehri and Rosenthal (2007) noted that vocabulary learning plays a considerable role in improving language skills. This process begins with identifying particular words in a manner that young learners retain in their memory. Once words are taught and learned, they automatically become associated with other words due to semantic relations processes (Landauer & Dumais, 1997). To be more specific, Westwood (2001) argued that the word identification process takes place when children can recall a word from their memory; letter decoding processes begin by combining sounds to create the intended word. Moreover, word identification skills include recognizing the meaning of a word and its pronunciation. In the process of sounding a word out, Vaughn and Linan-Thompson (2004) pointed out that this process involves the concept that young learners can convert written words into their constituent sounds. Another example from literature provided by Aarnoutse et al. (2005, p. 254) affirmed that "Recognition of the fact that words are composed of sounds is important for the following step within the period of early literacy, namely learning to identify words". This indicates that word identification skill is considered a definite component of the reading process.

Concerning the theoretical perspective on word identification, such a perspective lies in the theory proposed by Ehri (2005). She introduced four phases of word identification development to reach fully-automatic sight word recognition. These phases, which simply describe remarkable kinds of alphabetic knowledge, include pre-alphabetic, partial alphabetic, full alphabetic, and consolidated alphabetic. When young learners gain word identification skills, they can improve their reading skills, particularly comprehension.

It is important to note that any activity utilized in classrooms to boost word identification skills can be initiated on the IWB. In doing so, young learners will have great opportunities for interactive lessons. In addition, teachers of young learners are seen as facilitators in such a technological environment (Astutik et al., 2022). Hence, this paper investigates Jordanian EFL teachers' knowledge and perceptions of word identification improvement through using IWB technology.

2.3. Teachers' Perspectives of Technology Use

Technology has remarkably changed the way many teachers communicate, think, and behave during their teaching practices inside classrooms (Hennessy et al., 2022). Nowadays, teachers can take advantage of computers to show and explain vivid processes, facilitating students' learning (AbdAlgane & Jabir Othman, 2023; Ertmer & Ottenbreit-Leftwich, 2010; Hennessy et al., 2022). Moreover, to foster outstanding thought processes, teachers can demonstrate movie clips and videos of significant events from various periods in history (Mundy et al., 2012). Despite the substantial progress computer technology has achieved, there is a misconception that the Internet and computers have become the only fruitful technologies used in education (Lyle, 2009). Interestingly, Lyle (2009, p. 35) noted that various technologies are used in "design, making, problem-solving, technological systems, resources and materials, criteria and constraints, processes, controls, optimization, and trade-offs, invention, and many other aspects dealing with human innovation". All in all, it is crucial to examine studies based on teachers' perspectives regarding the use of technology.

It should be noted that there are robust studies on teachers' views of the use of technology inside classrooms. For instance, Akram et al. (2022) argued that teachers who are not fully experienced in technology adoption lack the professional development required for technology usage inside classrooms. In such situations, teachers have a poor chance to use and benefit from the adoption of technology inside classrooms. Once teachers get involved in effective classroom technology, they can easily use such technology for the sake of the instructional process (Akram et al., 2022; Rafi et al., 2019).

Furthermore, the literature affirms a strong association between the incorporation of technology and instructors' training. In Taiwan, Hsu (2010) found that once teachers receive rigorous training in technology usage, they potentially acquire successful incorporation of technology usage during their instructions in classrooms. Therefore, teachers must have training skills in technology usage, namely the IWB. Nonetheless, this does not mean that teachers may change or lose their roles in the teaching process whether they use technology or not. In a non-computer class environment, Wang (2002) contended that, according to teachers' view, their role is based on teacher-centered learning rather than student-centered learning. Besides, teachers do not believe that their role would be different in a non-computer class environment.

In another study conducted by Warschauer (2007), it has been revealed that higher socioeconomic status schools effectively incorporate technology since teachers confirm that their students have free and good access to their computers at home, allowing them to do their homework with the help of technology. For students in lower socioeconomic status schools, they can be compensated by offering devices such as laptops or smartphones; they can learn and use such devices at home. Additionally, Ertmer et al. (2006) conducted a study tackling the perceptions of teachers about the values necessary for having a typical technology user inside classrooms. The researchers revealed that teachers think that confidence in their ability to use and adopt technology has to be attainable by individuals. They should be committed to its usage as well. Hence, building confidence and training should be developed to get more integration of technology inside classrooms. The instructions can also be provided through visual and verbal means. This leads directly to the cognitive theory of multimedia learning.

2.4. Multimedia Learning Cognitive Theory

Mayer (2014) offered the cognitive theory of multimedia learning. His theory relied on three cognitive theory assumptions; it involves "dual channels, limited capacity, and active processing" (p.47). It is important to note that dual channels represent the process of auditory and visual knowledge. As for the second assumption, people vary in their capacity when information is processed in the mind through the above channels. In active processing, this view goes with active learning; people get involved in systematic processes such as input (incoming knowledge), organization, and integration of stored mental images with other information (Mayer, 2014).

To connect this theory with instructional technology, research affirmed that IWBs have been widely used in educational institutions because of the huge technical support necessary for the sake of the learning-teaching process occurring in a digital atmosphere (Akram et al., 2022). IWB technology has become an educational trend as this type of technology affords multimedia supporting lessons that meticulously serve most young learners' interaction and focus (Shi, 2017). According to Mayer's (2014, p.43) point of view, 'people learn more deeply from words and pictures than from words alone'. He argued that "Multimedia instructional messages that are designed in the light of how the human mind works are more likely to lead to meaningful learning than those that are not designed" (p.44). In this manner, the learning process has a distinguished benefit in helping learners' minds learn actively. Interestingly, Mayer (2014) pointed out that multimedia deals with providing information containing both words and images. Also, the action of employing words and images to build mental learning fundamentals is known as multimedia learning. For this purpose, IWB can help learners experience educational information in the shape of words and images; this supports further understanding of the courses and works offered to EFL students in elementary school classes (Mayer, 2003).

Furthermore, in his research entitled "Are We Asking the Right Questions", Mayer (1997, p.1) pointed out that multimedia learning can be defined as "presenting explanations visually as well as verbally". He also noted that students show remarkable attention in multimedia learning when knowledge is offered in different forms including words and images. In the same paper, Mayer (1997) argued that multimedia is considered a work "presenting computer-generated animations synchronized with computer-generated narration" in addition to "presenting illustrations next to the corresponding text" (p. 1). In conclusion, he found that "the potential for computer-based aids to learning remains high, although the current contribution of technology to pedagogic innovation is frustratingly low" (p.17). To this end, the same researcher recommended that "research is needed in how people learn with multimedia" (p.17).

All in all, this paper aims to investigate Jordanian EFL teachers' perspectives on the effect of the IWB technology on word identification enhancement. The two research questions for this paper are as follows: 1- What are the perspectives of Jordanian EFL teachers towards the effect of the IWB technology on word identification enhancement? 2- Are there any significant differences between EFL teachers' perspectives of word identification enhancement through using the IWB technology and their gender, age, academic degree, and teaching experience?

3. Methodology

3.1. Research Design and Sample of the Study

A quantitative method design has been chosen for this study because one of the qualities of this specific approach is to statistically collect and analyze data scientifically and systematically (Creswell, 2012). The population of this research was composed of 182 teachers teaching the English language to Jordanian EFL young learners in public primary schools, distributed within Jerash Directorate of Education. Moreover, teachers were selected since IWBs have been available in their schools; they taught English skills using this technological and instructional tool. They also knew their young learners' level so that they could decide on relevant plans to enhance their learning progress using the IWB. Given that Krejcie and Morgan's (1970) table has been utilized to determine the sample size, 124 (40 males and 84 females) EFL Jordanian teachers were selected and participated in this paper. It should be noted that Jerash public primary school, like any other school in other cities, provides young learners with similar curricula, not ignoring learners' equal socio-economic conditions and their qualified teachers. Interestingly, convenience sampling has been selected, as such sampling has been expressed as the most popular type employed in L2 studies (Farrokhi & Hamidabad, 2012). For ethical issues, it is important to note that informed consent was obtained from all participants. Table 1 demonstrates the demographic characteristics of the research participants.

Table 1: Research participants' demographic information

Item	Frequency	Percentage
Gender		
Male	40	32.3%
Female	84	67.7%
Total	124	100%
Age		
22-24	3	2.4%
25 -34	14	11.3%
35-44	70	56.5%
Over 45	37	29.8%
Total	124	100%
Academic Degree		
Diploma	22	17.7%
Bachelor	89	71.8%
Master	11	8.9%
PhD	2	1.6%
Total	124	100%
Years of Experience		
Less than 5	13	10.5%
5-10	29	23.4%
11-15	35	28.2%
16-20	23	18.5%
More than 20	24	19.4%
Total	124	100%

Source: Calculated by the Author

From Table 1, the results indicated that 67.7% of Jordanian EFL teachers were females and 32.3% of them were males. Concerning the age of participants, the age group category (35-44) represents the dominant age group by having the largest percentage (56.5%). Few participants from the age group category (22–24) represent the lowest percentage (2.4%). Concerning academic degrees, the majority of the respondents (71.8%) have a bachelor's degree, 8.9% of them have a master's degree, 17.7% of them have a Diploma degree, and two participants representing the lowest percentage (1.6%) have a PhD degree. Finally, in terms of years of experience, this category for Jordanian EFL teachers slightly varied. For instance, teachers with 11-15 years of experience

recorded the highest percentage (28.2%). The remaining data showed that 23.4% of the teachers' experience in teaching falls within the category of 5-10 years, 18.5% of them have taught for 16-20 years, 19.4 % of them have been taught for more than 20 years, and 10.5% of them have been taught for less than 5 years.

3.2. Instrumentation and Data Analysis

According to Creswell (2012), questionnaires should be distributed to a sample of respondents selected from a specific population. To achieve the objectives of this study, a cross-sectional questionnaire encompassing an investigation of Jordanian EFL teachers' perspectives concerning the impact of using the IWB technology on word identification enhancement was administered to EFL instructors teaching in Jordanian public primary schools in Jordan. For this paper, the survey involves two sections: the first section addresses demographic information such as participants' gender, age, academic degree, and years of experience. The second tackles items associated with Jordanian EFL teachers' perspectives on the influence of Interactive Whiteboards on word identification enhancement. Adopting the survey from Alhumsi's (2017) study, the current questionnaire consists of 10 items based on a 5-Likert-scale type, and its items were selected due to their appropriateness to the research objectives. Specifically, in this tool survey, eight items accentuate the positive effects, highlighting statements of the IWB on enhancing word identification. For instance, item 4 emphasizes that the images employed in the Interactive Whiteboard help EFL young learners participate more in boosting their word identification skills. In addition, item 9 focuses on the idea that the application of images in the Interactive Whiteboard strengthens EFL young learners' word identification skills. Conversely, 2 items concentrate on the statements highlighting the passive impact of the traditional whiteboard on enhancing word identification. For example, item 5 highlights that teachers may waste time if they use the Interactive Whiteboard to boost EFL young learners' word identification.

The participants in this research were asked to fill in this questionnaire regarding their perceptions of the effect of IWB technology on word identification enhancement. It is interesting to indicate that the participants took approximately 10 minutes to complete the questionnaire. It should be noted that the alpha coefficient for the whole questionnaire was found to be 0.851 for the sake of reliability purposes, as illustrated in Table 2.

Table 2: Reliability Check of the Questionnaire's Items

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.851	0.857	10

Source: Calculated by the Author

The result of reliability for this paper is regarded as highly reliable (see Creswell, 2012). As for the validity check, the questionnaire survey is reviewed by a panel of university professors and educators specializing in the field of linguistics and teaching. Their comments and recommendations offered by the specialists were meticulously considered. After a few weeks of receiving the questionnaire, data analysis was started using SPSS software version 22. In the process of data analysis, descriptive statistics, independent sample paired t-tests, and one-way ANOVA were employed.

4. Findings

4.1. Positive Effects of IWB on Word Identification Enhancement

The first research question tackles investigates Jordanian EFL teachers' perspectives on the effect of the IWB technology on word identification enhancement. A cross-sectional questionnaire for data collection has been used. Table 3 depicts the descriptive statistics, means, and standard deviations for the analysis of participants' responses.

Table 3: Teachers' perspectives towards the effect of IWB on word identification enhancement

No.	Items	Mean	SD
1	Word identification will be more fun when using the Interactive Whiteboard.	3.98	1.15
2	Word identification will be more fun if a traditional whiteboard is used.	2.56	1.17
3	The images used in the Interactive Whiteboard boost EFL young learners' motivation in word identification.	4.02	0.87
4	The images employed in the Interactive Whiteboard help EFL young learners participate more in boosting their word identification skills.	3.89	1.03
5	Educators may waste time if they use the Interactive Whiteboard to boost EFL young learners' word identification.	2.51	1.16
6	EFL young learners' word identification can only be enhanced by using the Interactive Whiteboard rather than using a traditional whiteboard.	3.32	1.09
7	Enhancing EFL young learners' word identification needs ongoing training done by teachers when the Interactive Whiteboard is used.	3.85	0.92
8	Enhancing EFL young learners' word identification by using the images provided in the Interactive Whiteboard gives better achievement than using a traditional whiteboard.	3.69	1.06
9	The application of images in the Interactive Whiteboard strengthens EFL young learners' word identification.	3.70	1.05

No.	Items	Mean	SD
10	The use of a traditional whiteboard may not fit the requirements of supporting EFL young learners' word identification.	3.39	1.11

Source: Calculated by the Author

Delving into the statistical analysis, Table 3 involves 10 items about EFL teachers' perspectives on the impact of the IWB on enhancing word identification. The findings of the above table showed that the mean of the EFL participants ranged between 2.51 and 4.02 (out of 5), meaning that large numbers of the respondents agreed that the use of IWB has positive effects on word identification enhancement. It should be noted that items 1, 3, 4, 6, 7, 8, 9, and 10 corresponded particularly to the positive impact of the IWB on enhancing word identification; these items notably support the IWB's favorable use. For example, item 1 (M= 3.98; SD=1.15) indicated that most of the respondents agreed that word identification would be more fun if IWB was used. It is interesting to note that item 3 (M= 4.02; SD= 0.87) recorded the highest mean score; it reflects the participants' agreement regarding the belief that the images used in the IWB boost EFL young learners' motivation in word identification. Item 4 (M= 3.89; SD=1.03) showed that most of the respondents believed that the images employed in the IWB help EFL young learners participate more in boosting their word identification skills. Item 6 (M= 3.32; SD=1.09) indicated that most of them agreed with the belief that EFL young learners' word identification should only be enhanced through using IWB rather than using a traditional whiteboard. Almost similar to the results in item 6, item 10 (M= 3.39; SD= 1.11) indicated that the participants agreed that the use of a traditional whiteboard may not suit the needs of EFL young learners' word identification. The responses to item 7 (M= 3.85; SD= 0.92) showed that large numbers of the respondents agreed that enhancing EFL young learners' word identification needs ongoing training done by teachers when the IWB is utilized. Regarding item 8 (M= 3.69; SD= 1.06), it has been found that many of the participants agreed that enhancing EFL young learners' word identification through using the images provided in the IWB gives better achievement than using a traditional whiteboard. Finally, item 9 (M= 3.70; SD= 1.06) showed that most of the participants agreed that the use of images in the IWB reinforces EFL young learners' word identification.

Nevertheless, items (2 and 5) stressed the passive impact of the traditional whiteboard on enhancing word identification. However, EFL teachers' responses did not support the traditional whiteboard's favorable use. It is important that the point behind adding two items (2, 5) was to make sure that the respondents did not choose their answers randomly. Specifically, item 2 (M= 2.56; SD= 1.17) indicated that moderate respondents agreed that word identification would be more fun when teachers used a traditional whiteboard. Being recorded as the lowest mean score, item 5 (M=2.51; SD=1.16) expressed that educators may waste time if the IWB is employed to boost EFL young learners' word identification.

4.2. The Effect of Variables on Questionnaire's Items

The second research question asked whether there are any significant differences between EFL teachers' perspectives on word identification enhancement through using IWB technology and their gender, age, academic degree, and teaching experience. To address this question, independent sample t-test analyses for gender and one-way ANOVA analyses for age, academic degree, and teaching experience were conducted to determine whether significant differences existed between the variables of this study.

Regarding the effect of gender, Table 4 illustrates the impact of gender on EFL teachers' perspectives of word identification enhancement using IWB technology through an independent sample t-test. The findings of the t-test revealed insignificant differences between Jordanian male and female EFL teachers' perspectives. Hence, gender does not have a noticeable impact on EFL teachers' perspectives, as indicated by the insignificant p-value = 0.20.

Table 4: The effect of gender

(Items 1-10)	Gender	N	Mean	SD	T	p
EFL teachers' perspectives on word identification enhancement using the IWB technology	Male	40	36.08	7.43	1.27	0.20
	Female	84	34.37	6.74		

*p < 0.05

It is crucial to note that analysis of variance (one-way ANOVA) was employed to determine whether a significant difference exists among EFL teachers' perspectives based on their ages. Thus, Table 5 presents the findings of the ANOVA analysis regarding EFL teachers' perspectives of word identification enhancement using IWB technology concerning the variable age. As shown in Table 5, there is no significant difference between EFL teachers' perspectives and their ages, with a p-value of 0.33.

Table 5: ANOVA for EFL teachers' perspectives and their ages

(Items 1-10)	Age	N	Mean	SD	T	p
EFL teachers' perspectives on word identification enhancement using the IWB technology	22-24	3	40.67	2.51	1.14	0.33
	25 -34	14	33.36	7.76		
	35-44	70	35.37	7.44		
	Over 45	37	34.19	5.81		
	Total	124	34.92	6.98		

*p < 0.05

Regarding the relationship between EFL teachers' perspectives and their academic degree, Table 6 displays the ANOVA results. It was found that there is an insignificant difference, indicated by the p-value (p= 0.21), suggesting no relationship between EFL teachers' perspectives of word identification enhancement using IWB technology and their academic degrees.

Table 6: ANOVA for EFL teachers' perspectives and their Academic Degrees

(Items 1-10)	Academic Degree	N	Mean	SD	T	p
EFL teachers' perspectives on word identification enhancement using the IWB technology	Diploma	22	34.23	6.62	1.52	0.21
	Bachelor	89	35.24	6.93		
	Master	11	35.55	4.27		
	PhD	2	25.00	21.21		
	Total	124	34.92	6.98		

*p < 0.05

Finally, Table 7 illustrates the relationship between EFL teachers' perspectives of word identification enhancement using IWB technology and their years of experience. The results of the ANOVA analysis indicated no relationship between EFL teachers' perspectives and their years of experience in teaching, with an insignificant p-value (p= 0.27).

Table 7: ANOVA for EFL teachers' perspectives and their years of experience

(Items 1-10)	Years of Experience	N	Mean	SD	T	p
EFL teachers' perspectives on word identification enhancement using the IWB technology	Less than 5	13	36.54	5.69	1.30	0.27
	5-10	29	35.31	9.05		
	11-15	35	36.20	6.85		
	16-20	23	32.48	6.86		
	More than 20	24	34.04	4.33		
	Total	124	34.92	6.98		

*p < 0.05

In summary, the independent sample t-test and the one-way ANOVA analyses demonstrate that there are no significant differences between EFL teachers' perspectives of word identification enhancement using IWB technology and their gender, age, academic degree, and years of experience. These findings suggest that EFL teachers' perspectives are not affected by the aforementioned variables.

5. Discussion

The current research was conducted to investigate Jordanian EFL teachers' perspectives on the effect of the IWB technology on word identification enhancement and whether their perspectives were influenced by the independent variables, namely gender, age, academic degree, and years of experience.

As for the first research question, it is interesting to consider the salient interpretations of the impacts of IWB technology on word identification enhancement by investigating the perspectives of Jordanian EFL teachers. For this paper, most of the questionnaire items recorded more than moderate mean scores. To be more specific, the desired effects of IWB have been remarkably emphasized by items 1, 3, 4, 6, 7, 8, 9, and 10. The findings of the aforesaid items proposed that Jordanian EFL teachers adequately identify the significant use as well as the benefits of IWB in enhancing their word identification. For example, items 1, 3, 4, 6, 8, and 9 accentuated the belief that using IWB in the classroom can be fun for EFL young learners and can enhance and motivate their word identification through using the images provided by IWB in a manner that helps EFL young learners participate more in improving their word identification skill. With previous research findings, this result is not surprising, and it goes in line with multiple studies. For example, research confirmed that young learners like IWB as learning will become more fun due to several kinds of activities provided by that instructional technology (IWB) (Hall & Higgins, 2005). In addition, Gray et al. (2005) stressed the impacts IWB possesses on foreign language contexts, leading to meaningful learning (Wood & Ashfield, 2008) as well as activating participation and motivation (Smith et al., 2005). Concerning the images employed in IWB, Smith et al. (2005, p. 97) affirmed that "Another feature of IWBs, which is claimed to promote learning is their multimedia and multi-sensory capacity. The presentation of stimulating visual images is claimed to enhance pupils' recall". This means that such visual images help young learners remember and figure out the images in their minds. In response to item 7, to enhance EFL young learners' word identification and raise EFL teachers' awareness of this type of technology, ongoing training is needed when the Interactive Whiteboard is used to gain better achievement. This result is consistent with the studies conducted by Samsonova (2021), Smith et al. (2005), and Bidaki and Mobasheri (2013). For instance, Smith et al. (2005, p.98) confirmed that "One of the most frequent issues raised by both teachers and pupils is the need for adequate training to use IWBs to their full potential". It should be noted that item 10 highlighted the belief that the use of a traditional whiteboard may not suit the needs of EFL young learners' word identification. This result is consistent with the study conducted by Katwibun (2014). Keeping up with the technological revolutions, instructors need to incorporate the IWB with both learning theory and pedagogy, serving learners' individual needs so that this technology can guide the academic achievement of the students (Katwibun, 2014).

Conversely, the results of items 2 and 5 reported a low level of appropriate utilization of traditional whiteboards in enhancing word identification. For example, EFL teachers disagreed with the belief that word identification would be more fun if a traditional whiteboard was used. In addition, they disagreed that educators may waste time when the Interactive Whiteboard is used to boost EFL young learners' word identification. These findings go in line with studies conducted by Samsonova (2021), Bidaki and Mobasheri (2013), and Smith et al. (2005). For instance, Bidaki and Mobasheri (2013, p.140) concluded that "IWB can enhance the pedagogical skills, increase the students' attention and save teaching time". However, Smith et al. (2005) contended that professional developments relating to IWBs have not been adequate to essentially change pupils' learning and their teacher pedagogy.

Delving into the second research question, it is crucial to consider the results of the independent variables, namely gender, age, academic degree, and years of experience. The findings for the current research statistically did not present any significant differences in their effect on EFL teachers' perspectives. The results showed that gender does not cause a significant difference in Jordanian EFL teachers' perspectives of word identification enhancement using the IWB technology. This means that gender did not have an impact on the Jordanian EFL teachers' perspectives. This can be related to the fact that most EFL teachers extremely agreed with the whole perspectives of word identification enhancement using the IWB technology. Also, this indicates that EFL teachers are mainly aware of the outstanding use of IWB in enhancing word identification. This result is in harmony with studies conducted by Alhumsi (2017), Olaimat (2022), Bakr (2011), and Wolter et al. (2015). Such studies did not show any significant differences in male and female perspectives of literacy skills and IWB in terms of gender. All in all, most studies revealed that gender differences have no impact on EFL teachers' perspectives towards the use of IWBs. This may open the door for further research to investigate whether there are significant differences between male and female participants' perspectives on the use of IWBs in EFL classrooms.

Regarding the age category, the demographic data emphasized that 56.5% of the participants were within the age category (35-44). This indicates that the results of the current research are potentially affected by this category. The results revealed that there were not any significant differences in the EFL teachers' perspectives of word identification enhancement through using the IWB technology in terms of the category of age variable ($f=1.14$, $p= 0.33$). This can be related to the large number of EFL teachers representing this specific category. The results of the current study are consistent with studies conducted by Alhumsi (2017). Based on the demographic data in terms of academic degree, the majority of the Jordanian EFL teachers (71.8%) must hold a bachelor's degree. Therefore, the findings of this paper are potentially affected by this specific category. Interestingly, the findings revealed that significant differences were not found in the EFL teachers' perspectives of word identification enhancement through using IWB technology to an academic degree. This finding is in harmony with several studies conducted by Taiwo and Adeniyi (2019), Alhumsi (2017), and Malkaw et al. (2020). In the category of years of experience, since there have been approximately close periods in terms of this category, the findings are affected by most EFL teachers' perspectives. It is important that the results found no significant differences in EFL teachers' perspectives of word identification enhancement through using IWB technology based on years of experience. This can be attributed to the fact that large numbers of EFL teachers agreed that the IWB positively has an impact on word identification enhancement. Additionally, this may give an implication that EFL teachers essentially have an awareness of the use of IWB in enhancing word identification skills. This result is consistent with studies conducted by Olaimat et al. (2022), and Taiwo and Adeniyi (2019). These studies showed no significant differences in EFL teachers' perspectives concerning literacy skills about years of experience. Nevertheless, the findings of Al-Rabaani's (2018) study showed that teachers' years of experience affected their attitudes and perceptions.

6. Conclusion, Recommendations, and Implications

Technology has played an outstanding role in changing people's thoughts, behavior, learning, and interaction with the world. This paper aims to present EFL teachers' perspectives on the impact of IWB technology on word identification enhancement in the Jordanian context. Interestingly, the theory of Multimedia Learning has been employed. Literature affirmed that there is a need to investigate EFL teachers' perception of using IWB in enhancing word identification within EFL contexts. A cross-sectional questionnaire was used for data collection. 124 EFL teachers' perspectives were examined by running the SPSS software system. For data analysis, descriptive statistics, independent sample paired t-tests, and one-way ANOVA were utilized. The results found that EFL teachers' perspectives have positive attitudes towards the impact of IWB on word identification enhancement; they support the favorable function of this technology and its impact on enhancing word identification skills. This implies that there is a noticeable consensus regarding the items of the questionnaire. The findings also revealed insignificant differences identified about research variables, including gender, age, academic degree, and years of experience. This could be attributed to EFL teachers' awareness of the effective use of IWB in enhancing word identification skills. Additionally, the EFL teachers' responses consistently reported high levels of IWBs' effective use. Hence, decision-makers, curriculum planners, professors, administrators, and educators should greatly take care of this technology to ensure the right and purposeful application to become a promising practice. In this respect, EFL teachers need more practice and training to reach the required achievement since IWB serves as an attractive atmosphere between pedagogical practice and technical innovations. Thus, it is recommended that EFL teachers are required to do ongoing training on how to activate and use the IWB technology (Luo et al., 2023). Furthermore, future research studies should try to investigate the differences between the experienced and novice

teachers' perspectives on the integration of IWB technology using qualitative and quantitative methods to get more fruitful data.

Acknowledgement Statement: The researcher would like to express his thanks and gratitude to the teachers participating in this research.

Conflicts of interest: The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Authors' contribution statements: As the sole author of this work, I conceived the research idea, designed the study methodology, collected and analyzed the data, interpreted the findings, and drafted the manuscript. Additionally, I revised and finalized the manuscript for submission.

Funding statements: As there was no external funding received for this research, the study was conducted without financial support from any funding agency or organization.

Ethical consideration statement: This study was conducted in accordance with the ethical standards of research involving human participants. Ethical approval was granted by the Ethics Committee of Saudi Electronic University (Approval No: SEUREC-4650). All participants were informed of the study's purpose, assured of the confidentiality of their responses, and provided informed consent prior to their participation.

Data availability statement: Data can be accessed upon request. Contact the corresponding author for further information regarding data usage and access.

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