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RESEARCH ARTICLE

**Section:** Digital Humanities

# The effectiveness of social media networks in teaching the Arabic language to students with autism

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#### **ABSTRACT**

The primary aim of this study was to investigate the efficacy of social media networks in facilitating Arabic language skills among students diagnosed with autism. The study included a cohort of students with ASD from schools located in the Zarqa Governorate. The original plan was for the trial to run for 30 days. Forty students participated in the study; twenty were chosen at random to participate in the experimental group, while twenty were designated as the control group. After the implementation of the intervention, the experimental group exhibited superior performance compared to the control group in assessments evaluating proficiencies in listening, speaking, reading, and writing. No notable disparities were seen among the experimental group with Arabic language proficiency scores, either during the follow-up assessment or immediately after the intervention.

**KEYWORDS:** social media networks, teaching the Arabic language skills, students with ASD, Zarqa Governorate

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#### Introduction

Autism is a highly enigmatic and intricate developmental disorder, characterized by uncertain origins and variables, diverse psychometric and clinical presentations, and varying degrees of maladaptive behavior patterns (Odom et al., 2021). A variety of symptoms and signs that are associated with autism include abnormal sensory responses to stimuli as well as difficulties with social and language skills. Individuals with autism also struggle with communicating with others and may lack language and speech abilities, despite having the potential for linguistic skills (Seok et al., 2018). An individual with autism experiences difficulties in social interaction and integration into society and may exhibit a preference for solitude throughout their lifetime. He exhibits selfcenteredness, isolates himself, rejects others' involvement, and displays emotional apathy (Seok et al., 2018). The degree of autism spectrum disorder (ASD) severity varies among individual children. The language and communication difficulties experienced by children with autism are significant and basic impairments that have adverse effects on their typical development, social interaction, and integration into their local communities (Tran et al., 2020). The difficulties observed in children with autism encompass both verbal and non-verbal communication impairments. According to Wilson and Landa (2019), these children not only have a deficiency in spoken language, but they also lack language in all its manifestations. In addition, they have deficiencies in both grammar and language abilities. Furthermore, they fail to make up for these deficiencies by employing non-verbal communication techniques such as gestures, motions, or simulations. Furthermore, they lack the ability to utilize visual communication.

To address language and communication challenges faced by children with autism, it is crucial to implement intervention programs that focus on training and rehabilitation. These programs aim to enhance the communication skills of these children by teaching them various methods to express their needs, emotions, and thoughts (Waddington & Reed, 2017). This is achieved by creating a suitable setting in which the child acquires the abilities to mimic sounds, movements, and actions, focus on a particular stimulus amidst multiple stimuli, comply with specific instructions, communicate their desires, and identify and label images or objects (Tran & Weiss, 2018).

The dynamics of social interaction and cultural customs are shaped by speech and cognition, which play critical roles in communication. In addition to being an esteemed part of Saudi Arabia's linguistic legacy, Arabic, as the kingdom's official language, is vital in developing a robust feeling of national identity. Arabic holds significant religious and cultural importance in Saudi Arabian culture, as it is the language used to write the Quran, the most revered book in Islam. The proliferation of social media has altered people's perspectives and language use, which could affect the preservation, development, and evolution of Saudi Arabian languages (Yaser et al., 2022). Several lines of inquiry suggest that social media may impact linguistic and attitude formation (Hortigüela-Alcalá et al., 2019). Common forms of informal, shortened language used on social media platforms include slang, acronyms, and emojis. These platforms primarily function as mediums for users to convey their thoughts and ideas through written communication (Sreeparvathy & Udayan, 2022). Because social media conversations tend to be more casual, individuals' language skills and linguistic norms may change as they become used to these sites. The ability to communicate with individuals from all over the world, regardless of language or culture, is just one more perk of social networking. People on the autism spectrum may experience changes in their attitudes and perceptions of linguistic status as a result of their exposure to different languages and communication technologies. Moreover, social media platforms enable the spread of information and ideas, including content that can significantly influence linguistic attitudes and ideologies; this has a vital impact on the growth and modification of language (Ben Lataifa and Darbali, 2022).

A thorough empirical investigation into this phenomenon is necessary to explore the possible effects of social media on the language usage of autistic pupils, especially considering the increasing importance of these platforms in Saudi Arabia (Mabkhot et al., 2022). Educators, legislators, and others involved in Saudi Arabia's language dynamics need a deep understanding of how autistic children use and perceive social media in order to tackle the changing dynamics of language in the country (Alharbi, 2019). Examining how social media platforms influence the teaching of Arabic to autistic children is the main objective of this research.

# **Research questions**

The purpose of this study is to analyze the specified topics in light of the previous discussion.

- 1. Are there statistically significant variations in the effectiveness of social media networks in teaching the Arabic language to students with autism between the experimental and control groups?
- 2. Are there significant variations in the effectiveness of social media networks in teaching the Arabic language to students with autism in the experimental group?
- 3. Is there a statistically significant difference in scores between post-test and follow-up tests when assessing the effectiveness of social media networks in teaching the Arabic language to students with autism?

#### **Literature Review**

Knowledge acquisition, cultural exchange, and interpersonal and societal communication are all greatly facilitated by the Internet and its many social networks. Internet use has skyrocketed in the last several years, drawing admiration from all corners of the globe (Ben Ltaifa & Derbali, 2022). With gratitude to a plethora of new services and applications, people may now view and analyze their own personal data, connect with old friends and acquaintances, meet new people, and even find others who share their interests (Yaser et al., 2022). As a result, among all Internet segments, social media sites have grown the fastest (Hortigüela-Alcalá et al., 2019). With the advent of website-based broadcast networks in the 1990s, the Internet was able to fulfill consumers' material requests, leading to explosive expansion in the industry. Sreeparvathy and Udayan (2022) estimate that millions of people throughout the world use this network. The developers of the Internet were therefore able to utilize browsers for more than just receiving data; they could also actively transmit and receive data. The evolution of electronic applications started with simple tools like email, chat, and message boards and ended with complex ones like the Wikipedia encyclopedia. The real beginning of web applications was marked by this change in how Internet browsers interact with one other. The idea of user interaction in website content is the basis of the current edition of 2Web (Almalki, 2020).

He seemed to transcend geographical limits and unite his kids as a little village thanks to these social media platforms, which expanded globally (Alzahrani et al., 2019). These sites have risen to the top of the Internet user rankings, and their renown among youth and society has only increased alongside the world's technological and communication improvements (Al-Gahtani 2018). Among these sites, Facebook has the most name recognition because of the ease with which its users may communicate inside its multi-staged virtual community. Facebook has become famous and successful because it is unique among social media platforms. One of its most distinctive features is its focus on young people; the company has long been aware of its immense popularity among this demographic, and the network continues to serve them well or poorly (Alnasser 2022).

Language originated as a means for people to express their needs and wishes, as well as to exchange information and enable discussion (Al-Gahtani, 2018). It served as an intermediary for individuals, enabling them to communicate with each other and utilize their language in situations when they may not have been able to do so otherwise. Signs and symbols form language, or the sounds made by the human mouth that have different cultural connotations depending on who is listening (AlShehri, 2017). The core of language is the allocation of symbols and phonetic signals to convey moral and sensory notions through culturally related word meanings (Alzahrani et al., 2019).

Research into the development of media-language interactions and the function of language in the production and dissemination of media messages gave rise to the theoretical area known as "linguistic media" (Al-Jasser et al., 2020). Individuals with an interest in media language were in search of explanations about its structure, lexicons, potential, and frameworks. They examined these recordings from linguistic, sociolinguistic, and psychological standpoints. According to Alnasser (2022), the primary argument was that oral communication preceded writing. The passion for language pertains to the ongoing discussion on the permissible usage of terminology in radio and television broadcasts, as well as the acceptable content for spoken and written communication (Al-Gahtani, 2018).

Previous research has demonstrated that social media sites frequently use informal and shortened forms of language, such as slang, acronyms, and emojis. Users' linguistic abilities and cultural norms about language use may be impacted by casual language usage on social media platforms. Alzahrani et al. (2019) found that

a large portion of Saudi Arabian Twitter users often employ acronyms, slang, and English loanwords. The competence with which they can communicate in formal Arabic may be affected by these language decisions. Research by AlShehri (2017) examined the online lexicon of Saudi Arabian college students. The study's findings show that these children often use slang, acronyms, and emotions in their online posts. To be more specific, the study's authors discovered that these features are often used by Saudi Arabian college students in their online essays.

Social media platforms can also influence individuals' attitudes towards languages and their perceptions of linguistic status. Studies have shown that exposure to many languages and communication styles on social media might influence an individual's perspectives and attitudes towards language usage. According to research by Al-Jasser et al. (2020), Facebook users in Saudi Arabia have certain linguistic views. Social media exposure to English was connected with more positive sentiments about English and a belief that English had more prestige than Arabic, according to their findings. Saudis who engaged in international social media interactions tended to have a more positive perception of the English language, according to the researchers. Alnasser (2022) found that exposure to English on social media positively influenced Saudi Arabian university students' perceptions of the English language. However, it did not have a significant effect on their attitudes towards the Arabic language.

In specific cultural and linguistic contexts, the existence of social media can influence the preservation, alteration, or transformation of language. A study carried out by Al-Gahtani (2018) investigated the shifts in Saudi Arabian language usage on social media. Based on the results, it's clear that Arabic communications are incorporating more and more English terms and phrases. In addition, people from Saudi Arabia who use Twitter nonetheless maintain utilizing Arabic, according to a research on language preservation. This is despite the fact that they seem to lean more towards English. This finding held true even when there were indications of a shift towards English.

Language and speech undergo a series of interconnected phases as they grow, which are influenced by factors such as age, IQ level, and social, physical, and motor maturity (Tran & Weiss, 2018). Consequently, autistic children do not acquire linguistic skills in the same manner as their neurotypical counterparts. Frequently, a child with ASD possesses the capacity to replicate the auditory patterns produced by those around them. Initially, the babble occurs randomly, but later it is intentionally imitated (Wilson & Landa, 2019). While young children learn and choose the sounds in a language, they employ them without understanding their significance. According to Waddington and Reed (2017), the main sign of autism spectrum disorder (ASD) is a significant delay in the development of abilities associated with making sounds, pronouncing words, building sentences, and making use of the cognitive aspects of verbal communication.

In the Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders, the main symptoms of ASD include a lack of verbal and non-verbal communication skills and the presence of repetitive and stereotyped behaviors. Brignell et al. (2018) reported that the proportion of children with autism who cannot develop or utilize speech within a limited scope varies from 25% to 30%. Multiple studies suggest that a significant proportion of children diagnosed with autism, ranging from 25% to 61%, have effective communication skills that may be restricted or absent. Autistic children who possess linguistic talents are incapable of utilizing language for communication. Prior to language development, the capacity to comprehend the significance and intention behind both spoken and unspoken communication is present, and this ability is connected to typical development in children. However, in many instances of autism, language skills emerge sooner and are distinct from communication. In addition, they employ non-adaptive strategies to achieve their communication objectives instead of seeking alternative methods to convey their thoughts and requirements in order to compensate for the absence of effective communication (Radley et al., 2015). Effective communication has a vital role in enabling children to articulate their thoughts and emotions, experience a sense of comfort and safety, and get the necessary support and aid from both their peers and adults (Tran & Weiss, 2018). It is widely recognized that children's communication abilities, especially their language skills, are the main factors that determine their social competency from an early age (Ruble et al., 2022). The communication framework has three essential components, namely form, content, and language. The communication abilities of children are contingent upon their practical language skills, which refer to the manner in which language is employed to convey meaning. Practical language encompasses a wide range of acts that encompass the social and emotional dimensions of

interaction (Tran & Weiss, 2018).

Complementing face-to-face interaction is the fundamental cognitive activity of social communication. Because no social connection can take place without communication, it is an essential component of healthy social development (Seok et al., 2020). It can be challenging for children with ASD to make and maintain friends at school. Regardless that people are more likely to form strong bonds with those who can meet their needs and empathize with their feelings, such as parents and caregivers (Zehner et al., 2017). This research does not support the idea that children with ASD are unable to develop friendships. Most likely, they just don't have the social skills necessary to connect with others, which makes it hard for them to make friends (Stark & Lindo, 2022). As children develop, it is essential that they learn social skills that will aid them in overcoming challenges such as a lack of empathy and an inadequate capacity to interpret nonverbal cues (Holmes, 2022). Their failure to understand the win-win elements of social interaction situations and their poor social imitation skills are likely to blame for the observed phenomena.

A kid diagnosed with autism exhibits difficulties in comprehending verbal communication, experiences significant limitations in social contact, and displays behaviors that suggest a lack of presence in their immediate environment (Asaro-Saddler, 2016). Children have a decreased propensity to extend invitations to their parents for engaging in their hobbies due to the comparatively lower frequency with which their parents are captivated by their toys, as well as their inclination towards activities that elicit quick emotional responses (Botha et al., 2021). The concept of theory of mind serves as a foundation for comprehending social difficulties in individuals with autism. ASD is characterized by a child's limited capacity to comprehend and acknowledge the existence of divergent perspectives, ideas, and goals held by others. Tran et al. (2020) identified the key social characteristics of autistic children as follows:

- Insufficient capacity for emotional and social interaction.
- Unaccustomed to greeting or bidding farewell to parents.
- They exhibit a lack of regard for the emotions or responses of the parents.
- Diminished capacity to establish visual contact.
- Individuals may experience challenges in comprehending and interpreting spoken language and directed speech.

#### **Previous Studies**

The study conducted by Baniyassen (2020) investigated the potential impact of social media platforms on English language acquisition and the potential for social media to enhance English language proficiency. The present study adopted a mixed methods approach, incorporating both quantitative and qualitative methodologies. This included the use of interviews, questionnaires, and an experimental research technique. The study included pre- and post-tests to assess the students' performance before to and following the experiment, with the aim of investigating the impact of social media platform usage on the enhancement of their writing and speaking abilities. The findings from the three research instruments, namely the questionnaire, interview, and quasi-experiment (pre-post-test), provide empirical support for the impact of social media platforms on students' English language acquisition abilities. In conclusion, the use of social media platforms has a significant role in enhancing students' abilities and fostering their desire in the composition of recount texts.

The study conducted by Jwaifell et al. (2020) examined the experiences of primary and secondary teachers about the effects, advantages, and disadvantages of social networking sites (SNS) in enhancing students' Arabic language acquisition. The study sample comprised 85 Arabic language instructors, out of whom 77 participants completed a questionnaire assessing their perceptions on the effect, strengths, and shortcomings of social networking sites (SNS). The data analysis unveiled the current influence, advantages, and disadvantages of social networking sites (SNS) on the acquisition of the Arabic language by primary and secondary students. The study suggested prioritizing the resolution of deficiencies and capitalizing on the utilization of social networking sites (SNS) in educational settings.

Muftah (2022) conducted a study to assess the influence of several social media platforms on English language acquisition among students within the COVID-19 epidemic. The research was carried out at the undergraduate level among individuals who are learning English as a second language. A total of 166

undergraduate students from Najran University were included in the sample. A survey questionnaire was conducted in order to assess the influence of different social media platforms and social networking sites on English language acquisition for the academic year 2020, specifically in light of the COVID-19 epidemic. Additionally, the study aimed to provide potential recommendations for enhancing future virtual language learning experiences. The study's findings made a valuable contribution to the field of online English learning during the COVID-19 epidemic. The conclusive findings have substantiated the notion that the incorporation of social media has been widely acknowledged to have had a notable and favorable influence on the acquisition of the English language, specifically in relation to writing style, reading proficiency, listening comprehension, lexical diversity, communication aptitude, and grammatical proficiency.

In their study, Alwaely et al. (2023) set out to determine how social media impacts linguistic habits and perspectives in Saudi Arabia. Using a mixed-methods approach, the research gathered quantitative data from a survey of 300 participants and qualitative data from in-depth interviews with 20 people randomly selected from the original 300. The statistics showed that most social media users in Saudi Arabia are interested in learning Arabic, but that language learning in general is a popular usage of these platforms. Users participate in a variety of language learning activities when using social media platforms, according to the descriptive statistics. Reading, watching videos, listening to audio, and practicing writing are all part of these pursuits. Results from the qualitative data analysis showed recurring themes, including people's preferences and attitudes about using social media to learn a new language, the platform's ease of use and accessibility, and the promotion of interest in and engagement with the target language. The results shed light on the substantial impact of social media on Saudi Arabian language use and attitudes, while also acknowledging that the degree to which this impact is influenced may vary depending on individual circumstances.

#### **Method**

The research employed an experimental approach to examine the impact of an independent variable, specifically the efficacy of social media networks, on a dependent variable, namely the teaching of the Arabic language. The researcher selected a design from the experimental technique that facilitated the establishment of a control group and an experimental group. This design involved the random selection of sample children and the collection of pre- and post-measurements. The sequence of events was as follows:

- The selected sample of 40 students was randomly divided into two groups: the control group and the experimental group.
- Verify that the children in both groups possess similar levels of proficiency in the Arabic language.
- The social media network program was implemented in the experimental group, whereas the control group was not exposed to it.
- In order to assess the influence of the independent variable, a post-measurement was conducted for both the control and experimental groups.
- The experimental group had a follow-up assessment about one month later to determine the continued influence of social media networks and to verify the authenticity of the change in the dependent variable (Arabic language skills), rather than it being temporary.

# Population and sample

The research sample consisted of students diagnosed with autism at the Directorate of Education in Zarqa between January 13, 2022, and March 3, 2024. The individuals comprising the research sample were selected based on the specified criteria outlined below:

- The age range for the learner should be between 6 and 15 years.
- The student's ability to reply and comprehend is not affected by any impairments, such as hearing impairment, as proven by the medical reports issued to them by the Ministry of Health.
- The intellectual capacity of the student is expected to fall within the normal range, as evidenced by the results of an IQ test conducted in a Jordanian context. Based on the results of the Arabic language scale administered to pupils, it was found that the student also exhibits difficulties in Arabic language proficiency.

A total of 40 children who met the specified requirements were randomly divided into two equal groups, each consisting of 20 students. The research utilized a social media network application that was randomly assigned to one of the two groups, which was designated as the experimental group. The control group, which did not get the social media network program, was the other group. The experimental sample underwent a two-month implementation of the social media network program, with ten sessions per month. This resulted in a total of 20 sessions for each student.

#### Research Instrument

In order to accomplish the research objectives, two research instruments were employed:

- 1- The scale of Arabic language skills: The researcher developed a measure based on the social media network program designed for students with ASD. The scale has a total of 24 questions, which have been arranged in descending order of difficulty. These questions assess many skills, including hearing through 7 items, speaking through 6 items, reading through 6 items, and writing through 5 items. The scale was employed as a measurement tool for the study sample during the pre-, post-, and follow-up stages.
- 2- The social media network program: A training program has been developed to enhance Arabic language abilities, utilizing a social media network as its foundation. This was accomplished by adhering to the procedures outlined in these programs, which involved referring to theoretical literature and previous research conducted by Muftah (2022) and Alwaely et al. (2023). The primary objective of this program is to facilitate the acquisition of Arabic language skills among students through a structured curriculum that incorporates various activities centered around social media networks. The utilization of social media sites, including WhatsApp, Facebook, and Telegram, was observed in the experimental group. The individuals underwent instruction inside the program in which they were already pursuing their educational experience.

# Instrument Validity and Reliability

Both of the following approaches were employed to assess the validity of the scale:

- 1. In order to determine whether the content of the scale has been validated, its contents are presented to eight arbitrators and the proportion (80%) is utilized as the percentage of agreement and approval among the arbitrators.
- 2. Discriminating validity of the scale was evaluated by administering it to ten experimental students with ASD as a sample. The F values yielded statistically significant discriminatory validity coefficients of 6.45, 6.80, 7.10, and 7.30, respectively.

The internal consistency of the scale was assessed in terms of reliability using the internal consistency approach, following the guidelines outlined in Cronbach's alpha equation. The overall dependability coefficient was determined to be 0.834, while the confidence intervals for the dimensions ranged from 0.803 to 0.856.

#### Data Analysis

The data collecting technique was completed after which the mean scores and dimensions of the pre- and posttests were computed. As a way to gauge how well the curriculum worked to improve ASD children' Arabic language abilities, the researchers calculated the impact size. Using the Eta square yielded the desired outcome. Using the Z-value and the Wilcoxon test, we determined the degree of dissimilarity between two samples that had comparable characteristics.

#### **Results and Discussion**

The researchers took measures to guarantee that the experimental and control groups possessed comparable levels of Arabic language proficiency prior to the implementation of the social media network training program, as seen in Table 1.

Table 1: Pre-tet

Dimension	Groups	N	M/R	S/R	U	Z	P
Listening skills	Experimental	20	11.40	228.00	44.00	0.703	0.603
	C 1	20	11 00	226.00			
	Control	20	11.80	236.00			
Speaking skills	Experimental	20	12.55	251.00	33.30	1.254	0.224
	Control	20	10.65	213.00			
Reading skills	Experimental	20	11.70	234.00	42.00	0.700	0.600
	Control	20	11.90	238.00			
Writing skills	Experimental	20	12.65	253.00	31.00	1.125	0.250
	Control	20	10.80	216.00			
Total	Experimental	20	12.10	242.00	50.00	0.081	0.558
	_						
	Control	20	11.29	225.80			

The statistics in Table 1 show that the experimental group and the control group did not differ significantly in their mean pre-test scores on the Arabic language skills exam.

To tackle the first issue, which seeks to determine whether there are any notable differences in the effectiveness of social media networks for teaching Arabic to autistic students, we compare the two groups. The following table displays the results.

Table 2: Post-test

Dimensions	Group	N	M/R	S/R	U	Z	P
Listening skills	Experimental	20	21.40	428.00	5.00	2.70	0.000
	Control	20	14.80	296.00			
Speaking skills	Experimental	20	22.55	411.00	7.00	1.80	0.000
	Control	20	13.65	273.00			
Reading skills	Experimental	20	21.70	434.00	4.00	3.20	0.000
	Control	20	14.90	298.00			
Writing skills	Experimental	20	22.65	453.00	3.50	3.70	0.000
	Control	20	13.80	276.00			
Total	Experimental	20	22.10	442.00	3.80	3.80	0.000
	Control	20	14.29	285.80			

Based on the findings shown in Table 2, the experimental group demonstrated substantially higher post-test scores compared to the control group in terms of listening, speaking, reading, and writing abilities, as well as the total score. This finding suggests that the children in the sample possess a high level of proficiency in listening, speaking, reading, and writing abilities.

Based on these results, it appears that the research program had a positive effect on the experimental group of children with ASD, but the control group did not. The researcher suggests that the students' technical proficiency, engagement, and enthusiasm in integrating these platforms into their lessons are to blame for the significant improvement in the experimental group's average scores on Arabic language proficiency tests after they completed the training program. One possible explanation for the observed outcome is that these websites have distinct qualities that set them apart from other entities. This methodology's capacity to encourage the participation of student cohorts in positive activities both inside and outside of the classroom is a significant advantage over more traditional forms of education. To achieve this goal, educational institutions must create conditions that encourage students to share and receive information. Direct proposal, transmission, reception,

tracking, engagement, querying, and commenting capabilities are now available to the student. He learns new things, gets better at things, and forms his own opinions and worldview via self-study. Because of this, he is able to think deeply about and assess many real-life scenarios. This study's results are in agreement with those of Baniyassen (2020), Jwaifell et al. (2020), Muftah (2022), and Alwaely et al. (2023).

Regarding the second issue, which concerns the effectiveness of social media networks in teaching Arabic to experimental group students with autism, there are significant differences. The results are shown in the table that follows.

Table 3: Pre/Post-test

Dimension	Pre/Po	N	M/R	S/R	Z	P
Listening skills	negative Rank	4	2.00	8	26.00	0.000
	positive Rank	16	9.00	144.00		
	ties	0				
	total	20				
Speaking skills	negative Rank	4	2.00	8	22.60	0.000
	positive Rank	16	9.00	144.00		
	ties	0				
	total	20				
Reading skills	negative Rank	4	2.00	8	23.50	0.000
	positive Rank	16	9.00	144.00		
	ties	0				
	total	20				
Writing skills	negative Rank	4	2.00	8	24.60	0.000
	positive Rank	16	9.00	144.00		
	ties	0				
	total	20				
Total	negative Rank	4	2.00	8	26.80	0.000
	positive Rank	16	9.00	144.00		
	ties	0				
	total	20				

The experimental groups' average results on tests in listening, speaking, reading, and writing Arabic were significantly different from one another. There is a lot of variation in the final evaluation outcomes, as seen in Table 3. The experimental group of students showed considerable improvement in their Arabic proficiency following the test.

This phenomenon may have been ascribed to the use of conventional pedagogical approaches by educators in conjunction with technology to facilitate the progression of the educational process. The teachers demonstrated their technological expertise by utilizing social networking sites to clarify lectures and deliver presentations, thereby enabling the proper assessment. This confirms the idea that social networking sites have a role in shaping the ethical, social, historical, geographical, and national aspects of society. This phenomenon is shown by the vast array of material accessible on the YouTube platform. This material not only enables users to cultivate their ethical principles but also nurtures a feeling of national identity, citizenship, and historical consciousness while shedding light on the geographical and historical consequences of every particular country.

As a result, this highlights the positive trajectory towards the use of social media platforms. Based on the overall result of the trend, teachers may perceive its utilization as a valuable investment in the learning process rather than a futile expenditure of time. The results reported in this study are consistent with the investigations carried out by Baniyassen (2020), Jwaifell et al. (2020), Muftah (2022), and Alwaely et al. (2023).

The last question is about determining whether or not there is a statistically significant difference between the pre- and post-test scores of autistic pupils who were taught Arabic using social media networks. In order to give a substantial remedy, it is essential to respond quickly to the present problem. The results are presented in a tabular style.

Table 4: Post /Follow-up test

Dimension	Po/ Fol	N	M/R	S/R	Z	P
Listening skills	negative Rank	15	13.40	201.00	11.20	0.110
	positive Rank	0	0.00	0.00		
	ties	5				
	total	20				
Speaking skills	negative Rank	15	13.40	201.00	10.70	0.130
	positive Rank	0	0.00	0.00		
	ties	5				
	total	20				
Reading skills	negative Rank	15	13.40	201.00	11.30	0.100
	positive Rank	0	0.00	0.00		
	ties	5				
	total	20				
Writing skills	negative Rank	15	13.40	201.00	10.40	0.150
	positive Rank	0	0.00	0.00		
	ties	5				
	total	20				
Total	negative Rank	15	13.40	201.00	10.10	0.090
	positive Rank	0	0.00	0.00		
	ties	5				
	total	20				

Results from the post-test and subsequent assessments do not demonstrate any statistically significant changes in the experimental group's average scores, according to Table 4. There was no recurrence after the program ended, which lends credence to the idea that the treatment was helpful even after the follow-up time ended. The children's increased fluency in Arabic and their continued participation in the program's activities prepared them for the situation, which may explain this result.

The training's impact lasted long after the follow-up time ended, thanks to the continuous assessment done throughout the session and the completion of assigned homework for every session. This demonstrates how actively they are participating and how keen they are to learn from this program. Students in the experimental group showed more improvement because the training program hall was designed to minimize distractions for children. This meant having comfortable seating, enough lighting, and no extra educational materials or posters. The success of the program may be attributed to the wide variety of educational approaches and technology

that were used to create it. The educational methodologies and materials included audiovisual aids that helped students understand how their actions correlated with thoughts, as well as real-life situations and opportunities to practice and recreate the target language's vocabulary.

#### **Conclusion**

The results of this study lend credence to the idea that people with ASD could benefit from a social media training program, particularly one that teaches Arabic. In addition, studies show that social media-focused training programs may be more effective than traditional ones in helping these students become more proficient Arabic speakers. Therefore, it is beneficial for instructors to enhance students' Arabic language skills within the classroom in order to achieve the program's objectives. The social media training program improves the language, literacy, listening, and comprehension abilities of autistic children. This study's results showed that a training program that focused on improvement was more effective than a control group of children with ASD after they participated in the program. According to the researcher, the experimental group's significantly higher mean scores on Arabic language proficiency assessments after the training program is likely due to the students' technical expertise, prior experience, and their eagerness to incorporate these platforms into their lessons.

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#### References

- Abualrish, M. A., & Khasawneh, M. A. (2024). Using social media as a platform of communication between school administration and the local communities to promote inclusive education for children with special needs. *Studies in Media* and Communication, 12(2), 79. https://doi.org/10.11114/smc.v12i2.6560
- Aburezeq, I. M., Dweikat, F. F., Al-Shaar, A. S., & Khasawneh, M. A. S. (2022). Case Study on the Dissemination of Radicalism on social media. *Information Sciences Letters*, 11(6), pp. 2339–2343. DOI: <a href="http://dx.doi.org/10.18576/isl/110640">http://dx.doi.org/10.18576/isl/110640</a>
- Ahmad Saleem Khasawneh, M. (2024). The efficacy of a programmed utilizing digital learning technology in fostering the life skills of students with learning disabilities. *International Journal of Learning, Teaching and Educational Research*, 23(4), 18-33. <a href="https://doi.org/10.26803/ijlter.23.4.2">https://doi.org/10.26803/ijlter.23.4.2</a>
- Al Jasser, R., Al Sarhan, M., Al Otaibi, D., & Al Oraini, S. (2020). Awareness toward COVID-19 precautions among different levels of dental students in King Saud University, Riyadh, Saudi Arabia. *Journal of multidisciplinary healthcare*, 1317-1324.
- Al Kasey, A.A.M., Al-Omari, A.K., Khasawneh, M.A.S., ...Khairy, M.A.Y., Al-Asmari, S.M.S.(2023). The reality of distance learning skills among general education teachers from the point of view of supervisors and school principals. Information Sciences Letters, 12(3), 1533-1547. https://doi.org/10.18576/isl/120340
- Al Sabi, Y. N., Jaradat, S. A., Ayasrah, M. N., Khasawneh, M. A. S., & Al Taqatqa, F. A. S. (2022). Shyness and its Relation with Self-esteem in Light of Some Variables. *Information Sciences Letters*, 11(6), 2345-235. https://doi.org/10.18576/isl/110641
- Alanazi, A. S., Almulla, A. A., & Khasawneh, M. A. (2023). Evaluating the effects of integrating cognitive presence strategies on teacher attitudes and student learning outcomes in special education and autism classrooms. *International Journal of Special Education (IJSE)*, 38(2), 80-89. <a href="https://doi.org/10.52291/ijse.2023.38.24">https://doi.org/10.52291/ijse.2023.38.24</a>
- Alanazi, A. S., Almulla, A. A., & Khasawneh, M. A.S. (2023). Exploring the E-learning supporting systems for students with special needs. *Revista de Gestão Social e Ambiental*, 17(7), e03917. <a href="https://doi.org/10.24857/rgsa.v17n7-0">https://doi.org/10.24857/rgsa.v17n7-0</a>
- Alelaimat, A. M., Baibers, H. S., & Khasawneh, M. A. (2023). Examining the impact of YouTube vlogging on communication skills in teens with speech and language disorders. *International Journal of Data and Network Science*, 7(4), 2077-2082. <a href="https://doi.org/10.5267/j.ijdns.2023.10.100">https://doi.org/10.5267/j.ijdns.2023.10.100</a>
- Al-Gahtani, S., & Roever, C. (2018). Proficiency and preference organization in second language refusals. *Journal of Pragmatics*, 129, 140-153. <a href="https://doi.org/10.1016/j.pragma.2018.01.014">https://doi.org/10.1016/j.pragma.2018.01.014</a>
- Al-Gaseem, M. M., & Khasawneh, M. A. S. (2022). Action Research in Science Teacher Education Program: Significance and Benefit According to the Students-Teachers' Assessments. *Przestrzeń Społeczna (Social Space)*, 22(3), 97-113.
- Al-Gaseem, M. M., & Khasawneh, M. A. S. (2023). Environmental Orientation for Art Teachers Education Program (EOATEP). *Journal of Higher Education Theory and Practice*, 23(12), 209-223.
- Alharbi, Y. G. (2019). A review of the current status of English as a foreign language (EFL) education in Saudi Arabia. *Global Journal of Education and Training*, 1(2), 1-8.
- Alkhasawneh, T., Al-Shaar, A. S., Khasawneh, M.A.S.., Darawsheh, S., & Aburaya, N. (2022). Self-Esteem and its Relationship to some Demographic Variables among Students with Learning Disabilities. *Information Sciences Letters*, 11(6), pp. 1929–1936. http://dx.doi.org/10.18576/isl/110609
- Alkhasawneh, T., & Khasawneh, M. A. (2024). The effect of using augmented reality technology in developing imaginative thinking among students with learning difficulties. *International Journal of Data and Network Science*, 8(3), 1679-1688. <a href="https://doi.org/10.5267/j.ijdns.2024.2.019">https://doi.org/10.5267/j.ijdns.2024.2.019</a>
- Alkhawalde, M. A., & Khasawneh, M. A. (2024). Designing gamified assistive apps: A novel approach to motivating and supporting students with learning disabilities. *International Journal of Data and Network Science*, 8(1), 53-60. <a href="https://doi.org/10.5267/j.ijdns.2023.10.018">https://doi.org/10.5267/j.ijdns.2023.10.018</a>
- Alkhawaldeh, M. A., Alwaely, S. A., Al Sabi, Y. N., Abueita, S. D., Alomari, N., Al Taqatqa, F. A. S., ... & Al-Shaar, A. S. (2023). Parents' role in gifted students' educational issues and development. *Information Sciences Letters*, 12(3), 1215-1221; https://doi.org/10.18576/isl/120312
- Alkhazaleh, M., Khasawneh, M. A. S., Alkhazaleh, Z. M., Alelaimat, A. M., & Alotaibi, M. M. (2022). An

- Approach to Assist Dyslexia in Reading Issue: An Experimental Study. Social Space, 22(3), 133-1513
- Almalki, S. (2020). Parenting Practices in Saudi Arabia: Gender-Role Modeling. Parents and Caregivers Across Cultures. *Positive Development from Infancy Through Adulthood*,
- Almulla, A. A., & Khasawneh, M. A. S. (2024). The Role of Libraries in Raising the Efficiency of Students with Special Needs in Academic Performance from The Point of View of Teachers. *Revista de Gestão Social e Ambiental*, 18(2), e04865-e04865.
- Almulla, A. A., Khasawneh, M. A., Abdel-Hadi, S. A., & Jarrah, H. Y. (2024). Influence of non-linear storytelling in video games on cognitive development among students with learning disabilities. *International Journal of Learning, Teaching and Educational Research*, 23(1), 84-97. <a href="https://doi.org/10.26803/ijlter.23.1.5">https://doi.org/10.26803/ijlter.23.1.5</a>
- Alnasser, S. M., & Almoaily, M. (2022). The elephant in the room: Is a nationwide English language policy needed in EFL contexts? A study on English departments in Saudi Arabian universities. World Journal of English Language, 12(5). https://doi.org/10.5430/wjel.v12n5p66
- Alomari, M. A., Alqudah, R. A., Al Rub, M. A., Alqsaireen, E. M., & Khasawneh, M. A. S. (2023). The Role of Media in Educational Social Construction of Children with Special Needs. *Information Sciences Letters*, 12(7), 2933-2940.
- Alomari, M. A., Daradkah, S. A., Al Rub, M. A., Alqsaireen, E. M., & Khasawneh, M. A. (2023). Utilization of Multimedia Services in Libraries for Students with Disabilities. https://doi.org/10.18576/isl/120717.
- Alqudah, H., & Khasawneh, M. A. (2024). Assessing cognitive flexibility: Quantitative insights into the impact of adaptive learning technologies in special education. *International Journal of Data and Network Science*, 8(3), 1463-1470. <a href="https://doi.org/10.5267/j.ijdns.2024.3.019">https://doi.org/10.5267/j.ijdns.2024.3.019</a>
- Alqudah, H., Mohammad, F. S., Khasawneh, Y. J., & Khasawneh, M. A. (2024). Assessing the influence of parental involvement on the effectiveness of gamified early childhood education in Jordan. *International Journal of Data and Network Science*, 8(3), 1977-1984. https://doi.org/10.5267/j.ijdns.2024.1.015
- Alrishan, A. M. H., Alwaely, S. A., Alshammari, A. K., Alshammari, R. K., & Khasawneh, M. A. S. (2023). The impact of the Teacher's personality on the motivation of learning the English language among governmental school students in Saudi Arabia. *Information Sciences Letters*, 12(3), 1223-1230.
- Al-Rousan, A. H., Ayasrah, M. N., & Khasawneh, M. A. S. (2023). Psychological Stability and its Relationship to Academic Performance Among Secondary School Students: <a href="https://doi.org/10.18576/isl/120335">https://doi.org/10.18576/isl/120335</a>
- Alshehri, E. (2017). Using Learners' First Language in EFL Classrooms. *IAFOR Journal of Language Learning*, 3(1), 20-33.
- Alsowait, M. M., Obeidat, S. S., Obeidat, L. M., Ayasrah, M. N., & Khasawneh, M. A. (2023). Aligning Translation: A guide for special education teachers and parents. *Studies in Media and Communication*, 12(1), 102. <a href="https://doi.org/10.11114/smc.v12i1.6573">https://doi.org/10.11114/smc.v12i1.6573</a>
- Alsowait, M. M., Obeidat, S. S., Obeidat, L. M., Ayasrah, M. N., & Khasawneh, M. A. (2023). Navigating the social media landscape: A guide for special education teachers and parents. *Studies in Media and Communication*, 12(1), 102. <a href="https://doi.org/10.11114/smc.v12i1.6573">https://doi.org/10.11114/smc.v12i1.6573</a>
- Alsrehan, H., Alhrahsheh, R., AlOdwan, S. S., Nser, K. K., Darawsheh, S. R., Khasawneh, M. A.S, & Owis, M. Z. (2024). Virtual reality socialization groups on Facebook: A new frontier for children with social anxiety disorder. *International Journal of Data and Network Science*, 8(2), 1229-1236. <a href="https://doi.org/10.5267/j.ijdns.2023.11.011">https://doi.org/10.5267/j.ijdns.2023.11.011</a>
- Alwaely, S. A., Almousa, N. A., Helali, M. M., Ali, R. M., Rashed, R. M., Mashal, A. A., Saleh, S. G., Darawsheh, S. R., & Khasawneh, M. A. (2024). Teacher-student rapport and gamified learning: Investigating the role of interpersonal variables in classroom integration. *International Journal of Data and Network Science*, 8(2), 1319-1324. https://doi.org/10.5267/j.ijdns.2023.11.003
- Alwaely, S. A., El-Zeiny, M. E., Alqudah, H., Alamarnih, E. F., Salman, O. K., Halim, M., & Khasawneh, M. A.S. (2023). The impact of teacher evaluation on professional development and student achievement. *Revista de Gestão Social e Ambiental*, 17(7), e03484. <a href="https://doi.org/10.24857/rgsa.v17n7-022">https://doi.org/10.24857/rgsa.v17n7-022</a>
- Alzahrani, A., Alghamdi, A., Alqarni, T., Alshareef, R., & Alzahrani, A. (2019). Prevalence and predictors of depression, anxiety, and stress symptoms among patients with type II diabetes attending primary healthcare centers in the western region of Saudi Arabia: a cross-sectional study. *International journal of mental health systems*, 13(1), 1-7. <a href="https://doi.org/10.1186/s13033-019-0307-6">https://doi.org/10.1186/s13033-019-0307-6</a>

- Aspects of the Ayyubids patronage of Jerusalem 583 AH/ 1187 AD 658 AH/ 1260 AD. (2023). *Information Sciences Letters*, 12(6), 2699-2706. https://doi.org/10.18576/isl/120640
- Baniawwad, A. H., Tarif, L. I. B., Rady, Y., Yousef, N. I., Soliman, M., Farag, H. A., ... & Khasawneh, M. A. S. (2024). Influence of Assistive Technology Training on Educators Performance in Saudi Special Education: With the Mediating Role of Educators Knowledge and Educators Self-Efficacy. *Eurasian Journal of Educational Research*, 110(110), 1-17.
- Baniyassen, Sameer O., "The Impact of Social Media on Improving English Learning Skills: A Case Study of UAE" (2020). *Dissertations*. 83. https://scholarworks.uaeu.ac.ae/all\_dissertations/83
- Ben Ltaifa, M., & Derbali, A. M. S. (2022). The Importance of Social Networks in Enhancing the Dimensions of Citizenship among Students in Saudi Arabia. *Education Research International*, 2022. <a href="https://doi.org/10.1155/2022/2990659">https://doi.org/10.1155/2022/2990659</a>
- Botha, M., Hanlon, J., & Williams, G. L. (2021). Does Language Matter? Identity-First Versus Person-First Language Use in Autism Research: A Response to Vivanti. Journal of Autism and Developmental Disorders. https://doi.org/10.1007/s10803-020-04858-w
- Brignell, A., Morgan, A. T., Woolfenden, S., Klopper, F., May, T., Sarkozy, V., & Williams, K. (2018). A systematic review and meta-analysis of the prognosis of language outcomes for individuals with ASD. *Autism & Developmental Language Impairments*, 3, 2396941518767610. <a href="http://dx.doi.org/10.1177/2396941518767610">http://dx.doi.org/10.1177/2396941518767610</a>
- Darawsheh, S. R., Al-Darabah, I. T., Bedaiwy, A. A., Gmach, I., Alfandi, A. A. A., Elsharkasy, A. S., ... & Khasawneh, M. A. S. (2023). Emotional Intelligence for English Students with Learning Disabilities in Light of Some Variables. https://doi.org/10.18576/isl/120327
- Darawsheh, S. R., Asha, I. K., AbuSaif, R., Alhejoj, A. F., & Khasawneh, M. A. (2023). An outline of the professional quality of teachers who teach children with special needs. *Journal of Education and e-Learning Research*, 10(3), 358-363. https://doi.org/10.20448/jeelr.v10i3.4711
- Hadhrami, A. S. A. L., Al-Amrat, M. R., Khasawneh, M. A. S., & Darawsheh, S. R. (2022). Approach to Improve Reading Skill of Students with Dyslexia: *Information Sciences Letters*, 11(6), pp. 2333–2338. <a href="http://dx.doi.org/10.18576/isl/110639">http://dx.doi.org/10.18576/isl/110639</a>.
- Hanandeh, A., Al-Badaineh, G., Kilani, Q., Freijat, S. Y., Abualfalayeh, G., & Khasawneh, M. A. (2024). The effects of social media platforms in influencing consumer behavior and improving business objectives. *International Journal of Data and Network Science*, 8(4), 2333-2340. <a href="https://doi.org/10.5267/j.ijdns.2024.5.023">https://doi.org/10.5267/j.ijdns.2024.5.023</a>
- Hanandeh, A., Hammouri, Q., Tweijer, A. A., Kilani, Q., Abualfalayeh, G., & Khasawneh, M. A. (2024). Data-driven transformation: The influence of analytics on organizational behavior in IT service companies. *International Journal of Data and Network Science*, 8(4), 2037-2046. <a href="https://doi.org/10.5267/j.ijdns.2024.7.005">https://doi.org/10.5267/j.ijdns.2024.7.005</a>.
- Hanandeh, A., Qudah, M. A., Mansour, A., Al-Qudah, S., Abualfalayeh, G., Kilani, Q., & Khasawneh, M. A. (2024). The achievement of digital leadership sustainability and business performance through the implementation of business intelligence, artificial intelligence, and quality learning in private universities in Jordan. *Uncertain Supply Chain Management*, 12(4), 2581-2586. <a href="https://doi.org/10.5267/j.uscm.2024.5.012">https://doi.org/10.5267/j.uscm.2024.5.012</a>
- Hazaymeh, W.A., Khasawneh, M.A.S.(2024). Examining the use of social media in teaching and learning foreign languages and the impact on students' speaking abilities. *Research Journal in Advanced Humanities*, 2024, 5(2), pp. 69–82
- Holmes, S. C. (2022). Inclusion, autism spectrum, students' experiences. International *Journal of Developmental Disabilities*, 1–15. https://doi.org/10.1080/20473869.2022.2056403
- Hortigüela-Alcalá, D., Sánchez-Santamaría, J., Pérez-Pueyo, Á., & Abella-García, V. (2019). Social networks to promote motivation and learning in higher education from the students' perspective. Innovations in Education and Teaching International, 56(4), 412-422. <a href="https://doi.org/10.1016/j.ijinfomgt.2020.102168">https://doi.org/10.1016/j.ijinfomgt.2020.102168</a>
- Jarrah, H. Y., Bilal, D. A., Halim, M., Helali, M. M., AlAli, R. M., Alfandi, A. A., & Khasawneh, M. A. (2024).

- The impact of storytelling and narrative variables on skill acquisition in gamified learning. *International Journal of Data and Network Science*, 8(2), 1161-1168. https://doi.org/10.5267/j.ijdns.2023.11.018
- Jwaifell, M., Abu-Omar, R., & BaniAbdel-Rahman, M. (2020). Schools Teachers' Experiences of Social Network Sites in Relation to Improving the Skills of Arabic Language Acquisition: Impact, Strengths, and Weaknesses. *International Journal of Higher Education*, 9(5), 153-166.
- Khasawneh, M. A. (2024). Academic integrity and the use of ChatGPT by EFL pre-service teachers. Journal of Infrastructure, Policy and Development, 8(7), 4783. <a href="https://doi.org/10.24294/jipd.v8i7.4783">https://doi.org/10.24294/jipd.v8i7.4783</a>
- Khasawneh, M. A. (2024). Performance assessment of the calculus students by using scoring rubrics in composition and inverse function. Applied Mathematics & Information Sciences, 18(5), 1037-1049. <a href="https://doi.org/10.18576/amis/180511">https://doi.org/10.18576/amis/180511</a>
- Khasawneh, M. A. S. (2021). The Impact of Phonological Awareness in Improving Sequential Memory among Students with Learning Disabilities. *International Journal of Disability, Development, and Education*, 1-13. <a href="https://doi.org/10.1080/1034912X.2021.1995853">https://doi.org/10.1080/1034912X.2021.1995853</a>
- Khasawneh, M. A. S. (2021). The Level of Job Performance among Teachers of Learning Disabilities in the English Language During The COVID-19 Pandemic from Their Point of View. *International Journal of Contemporary Research and Review*, 12(10),20449-20457; <a href="https://doi.org/http://ijcrr.info/index.php/ijcrr/article/view/924/947">https://doi.org/http://ijcrr.info/index.php/ijcrr/article/view/924/947</a>.
- Khasawneh, M. A. S. (2021). The level of motivation among teachers of learning disabilities in the English language in light of the COVID-19 pandemic. *Social Science Learning Education Journal*, 6(11), 642-651DOI: https://doi.org/10.15520/sslej.v6i11.2871.
- Khasawneh, M. A. S. (2021). Training program on developing reading skills in the english language among students with learning difficulties. *Revista EDUCARE-UPEL-IPB-Segunda Nueva Etapa* 2.0, 25(1), 84-101. DOI: 10.46498/reduipb.v25i1.1466
- Khasawneh, M. A. S. (2021a). An electronic Training Program on Developing the Written Expression Skills among a Sample of foreign language learners EFL who are at-risk for Learning disabilities during the emerging Covid-19. *Academy of Social Science Journal*, 7(10), 1974-1982. DOI: HTTPS://DOI. ORG/10.15520/ASSJ.V7I10.2713
- Khasawneh, M. A. S. (2021b). Attitudes of teachers of learning disabilities in English language towards the use of information technology in Irbid from their point of view. *Journal of Advances in Social Science and Humanities*, 7(10), 1957-1966. DOI:10.15520/jassh.v7i10.661
- Khasawneh, M. A. S. (2023). Exploring the influence of distant learning and MOOCs in foreign language lecturers' professional development.
- Khasawneh, M. A. S. (2023). Factors Affecting the Improvement of Speaking Skills Among Jordanian EFL Learners. *Journal of Language Teaching and Research*, 14(6), 1559-1568.
- Khasawneh, M. A. S. (2023). Interpersonal Communication Model for Children with Special Needs, *Information Sciences Letters*, 12(6), 2469-2474. <a href="https://doi.org/10.18576/isl/120623">https://doi.org/10.18576/isl/120623</a>
- Khasawneh, M. A. S. (2024a). Exploring how language learning platforms on Instagram and TikTok can facilitate collaborative foreign language learning experiences of undergraduates. *Research Journal in Advanced Humanities*, 2024, 5(3), pp. 174–187.
- Khasawneh, M. A. S. (2024b). A Look at the impacts of the application of collaborative technologies in foreign language teaching; Insights from lecturers. *Research Journal in Advanced Humanities*, 2024, 5(3).
- Khasawneh, M. A. S. (2024c). Analyzing the strategic effects of AI-Powered virtual and augmented reality systems in English language education at the tertiary level. *Research Journal in Advanced Humanities*, 2024, 5(3), pp. 188–202
- Khasawneh, M. A. S., & Al-Rub, M. O. A. (2020). Development of Reading Comprehension Skills among the Students of Learning Disabilities. *Universal Journal of Educational Research*, 8(11), 5335-5341. DOI: 10.13189/ujer.2020.081135
- Khasawneh, M.A.S.(2024). Investigating the use of video gaming technologies in enhancing language skills of FL students. *Research Journal in Advanced Humanities*, 2024, 5(2), pp. 55–68
- Khasawneh, N. A. S., & Khasawneh, M. A. S. (2022). Linguistic Needs of Non-Native Students of Arabic Language at Saudi Universities. *International Journal of Language Education*, 6(3), 245-253.

- Khasawneh, Y. J. A., Jarrah, H. Y., Alsarayreh, R. S., & Khasawneh, M. A. S. (2023). The Role of Cloud Computing in Improving the Performance of School Principals. *Eurasian Journal of Educational Research*, 107(107), 110-125.
- Khasawneh, Y. J. A., Khasawneh, M. A. S., Alkhasawneh, T., Alwaely, S. A., & Al-Barakat, G. A. M. (2024). Using smartphone applications to administer the educational process. *Arts Educa*, *39*.
- Khasawneh, M. (2020). The effect of the spread of the new COVID-19 on the psychological and social adaptation of families of Persons with Disabilities in the Kingdom of Saudi Arabia. *Health Psychology Report*, 9(3), 264-275. <a href="https://doi.org/10.5114/hpr.2020.99003">https://doi.org/10.5114/hpr.2020.99003</a>
- Khasawneh, M. (2024). The influence of Twitter hashtags in building supportive online communities for parents of children with special needs. Journal of Technology and Science Education, 14(3), 770. https://doi.org/10.3926/jotse.2537
- Khasawneh, M. A. (2020). The extent of bullying against students with learning disabilities according to the age variable. *International Journal of Learning*, *Teaching and Educational Research*, 19(6), 267-281. <a href="https://doi.org/10.26803/ijlter.19.6.16">https://doi.org/10.26803/ijlter.19.6.16</a>
- Khasawneh, M. A. (2023). Digital inclusion: Analyzing social media accessibility features for students with visual impairments. *Studies in Media and Communication*, 12(1), 71. <a href="https://doi.org/10.11114/smc.v12i1.65">https://doi.org/10.11114/smc.v12i1.65</a>
- Khasawneh, M. A. (2024). Accessibility matters: Investigating the usability of social media platforms for individuals with motor disabilities. *Studies in Media and Communication*, 12(2), 1. <a href="https://doi.org/10.11114/smc.v12i2.6615">https://doi.org/10.11114/smc.v12i2.6615</a>
- Khasawneh, M. A. (2024). Adapting multisensory techniques for dyslexic learners in English language learning: A case study approach. *World Journal of English Language*, 14(5), 553. <a href="https://doi.org/10.5430/wjel.v14n5p553">https://doi.org/10.5430/wjel.v14n5p553</a>
- Khasawneh, M. A. (2024). Beyond digital platforms: Gamified skill development in real-world scenarios and environmental variables. *International Journal of Data and Network Science*, 8(1), 213-220. <a href="https://doi.org/10.5267/j.ijdns.2023.10.002">https://doi.org/10.5267/j.ijdns.2023.10.002</a>.
- Khasawneh, M. A. (2024). Evaluating the efficacy of tablet-based assistive technology in Saudi special education settings. *International Journal of Learning, Teaching and Educational Research*, 23(6), 547-561. https://doi.org/10.26803/ijlter.23.6.25
- Khasawneh, M. A. (2024). Investigating the impact of automated instruments used for assessing the writing skill: Perspectives of language E-lEarnErs. *Research Journal in Advanced Humanities*, 5(2). <a href="https://doi.org/10.58256/4fd2qt78">https://doi.org/10.58256/4fd2qt78</a>
- Khasawneh, M. A. (2024). Teacher opinions on the role of educational robots in enhancing programming skills among hearing-impaired students. *International Journal of Learning, Teaching and Educational Research*, 23(5), 309-322. <a href="https://doi.org/10.26803/ijlter.23.5.16">https://doi.org/10.26803/ijlter.23.5.16</a>
- Khasawneh, M. A. (2024). The challenges facing vocational education online from the teachers' perspectives. *Journal of Curriculum and Teaching*, 13(2), 180. <a href="https://doi.org/10.5430/jct.v13n2p180">https://doi.org/10.5430/jct.v13n2p180</a>.
- Khasawneh, M. A. (2024). The effect of a teaching program based on cloud computing in developing writing skills among autistic students. *International Journal of Data and Network Science*, 8(4), 2163-2172. <a href="https://doi.org/10.5267/j.ijdns.2024.6.015">https://doi.org/10.5267/j.ijdns.2024.6.015</a>
- Khasawneh, M. A. (2024). The effectiveness of cloud computing in developing critical thinking skills among early childhood students. International Journal of Data and Network Science, 8(4), 2459-2468. https://doi.org/10.5267/j.ijdns.2024.5.012
- Khasawneh, M. A. (2024). Verbal violence on social networking websites and its impact on students with disabilities from the parents' perspectives. *Studies in Media and Communication*, 12(2), 321. <a href="https://doi.org/10.11114/smc.v12i2.6753">https://doi.org/10.11114/smc.v12i2.6753</a>
- Khasawneh, M. A. S. (2023). The use of video as media in distance learning for deaf students. *Contemporary Educational Technology*, 15(2), ep418. <a href="https://doi.org/10.30935/cedtech/13012">https://doi.org/10.30935/cedtech/13012</a>
- Khasawneh, M. A., & Alkhawaldeh, M. A. (2020). The effectiveness of phonological awareness training in treating deficiencies in auditory processing among children with learning disabilities among elementary cycle students in Saudi Arabia. *International Journal of Language Education*. <a href="https://doi.org/10.26858/">https://doi.org/10.26858/</a>

#### ijole.v4i3.14758

- Khasawneh, M. A., & Shawaqfeh, A. T. (2024). Breaking traditional boundaries in translation pedagogy; Evaluating how senior lecturers have incorporated digital tools to enhance translation teaching. World Journal of English Language, 14(4), 154. https://doi.org/10.5430/wjel.v14n4p154
- Khasawneh, M. A.S. (2023). Analysis of the application of pedagogical technology to the learning of children with ASD. *International Journal of Special Education (IJSE)*, 38(1), 82-89. <a href="https://doi.org/10.52291/ijse.2023.38.8">https://doi.org/10.52291/ijse.2023.38.8</a>
- Khasawneh, M. A.S. (2023). Mutual relationships: Saudi universities and the private sector for economic development. *Information Sciences Letters*, 12(8), 2643-2652. https://doi.org/10.18576/isl/120818
- Khasawneh, M. A.S., & Khasawneh, Y. J. (2023). Achieving assessment equity and fairness: Identifying and eliminating bias in assessment tools and practices. <a href="https://doi.org/10.20944/preprints202306.0730.v1">https://doi.org/10.20944/preprints202306.0730.v1</a>
- Khasawneh, M.A.S. (2023). Social attitude of children with special needs in the learning process. *Medical Archives*, 77(2), 149. https://doi.org/10.5455/medarh.2023.77.149-153
- Khasawneh, Y. J., & Khasawneh, M. A.S. (2023). Availability of voice-recognition devices to support visually impaired students in Saudi Arabian universities. *Journal of Wireless Mobile Networks*, *Ubiquitous Computing*, and Dependable Applications, 14(3), 186-193. <a href="https://doi.org/10.58346/jowua.2023.i3.014">https://doi.org/10.58346/jowua.2023.i3.014</a>
- Khasawneh, Y. J., Alanazi, A. S., Almulla, A. A., & Khasawneh, M. A. (2024). Employing technology inside and outside the classroom by special education teachers in primary schools. *Humanities and Social Sciences Letters*, 12(1), 1-9. <a href="https://doi.org/10.18488/73.v12i1.3591">https://doi.org/10.18488/73.v12i1.3591</a>
- Khasawneh, Y. J., Alsarayreh, R., Ajlouni, A. A., Eyadat, H. M., Ayasrah, M. N., & Khasawneh, M. A. (2023). An examination of teacher collaboration in professional learning communities and collaborative teaching practices. *Journal of Education and e-Learning Research*, 10(3), 446-452. <a href="https://doi.org/10.20448/jeelr.v10i3.4841">https://doi.org/10.20448/jeelr.v10i3.4841</a>
- Khasawneh, Y. J., Khasawneh, N., & Khasawneh, M. A. (2024). Exploring the long-term effects: Retention and transfer of skills in gamified learning environment. *International Journal of Data and Network Science*, 8(1), 195-200. <a href="https://doi.org/10.5267/j.ijdns.2023.10.004">https://doi.org/10.5267/j.ijdns.2023.10.004</a>
- Mabkhot, H., Isa, N. M., & Mabkhot, A. (2022). The Influence of the Credibility of Social Media Influencers SMIs on the Consumers' Purchase Intentions: Evidence from Saudi Arabia. *Sustainability*, 14(19), 12323. <a href="https://doi.org/10.3390/su141912323">https://doi.org/10.3390/su141912323</a>
- Mansour, A., Harahsheh, F., Wazani, K. W., khasawneh, M., & AlTaher, B. B. (2024). The influence of social media, big data, and data mining on the evolution of organizational behavior: Empirical study in Jordanian telecommunication sector. *International Journal of Data and Network Science*, 8(3), 1929-1940. https://doi.org/10.5267/j.ijdns.2024.1.020.
- Muftah, M. (2022). Impact of social media on learning English language during the COVID-19 pandemic. *PSU Research Review*.
- Nser, K. K., Alhrahsheh, R., Alshalabi, N., Jarrah, H. Y., & Khasawneh, M. A. (2024). Multimodal social network analysis: Exploring language, visual, and audio data in online communities. *Studies in Media and Communication*, 12(2), 148. <a href="https://doi.org/10.11114/smc.v12i2.6666">https://doi.org/10.11114/smc.v12i2.6666</a>
- Odom, S. L., Hall, L. J., Morin, K. L., Kraemer, B. R., Hume, K. A., McIntyre, N. S., Nowell, S. W., Steinbrenner, J. R., Tomaszewski, B., Sam, A. M., & DaWalt, L. (2021). Educational Interventions for Children and Youth with Autism: A 40-Year Perspective. *Journal of Autism and Developmental Disorders*. https://doi.org/10.1007/s10803-021-04990-1
- Radley, K. C., McHugh, M. B., Taber, T., Battaglia, A. A., & Ford, W. B. (2015). School-Based Social Skills Training for Children with ASD. Focus on Autism and Other Developmental Disabilities, 32(4), 256–268. https://doi.org/10.1177/1088357615583470
- Ruble, L. A., Love, A. M. A., Wong, V. W., Grisham-Brown, J. L., & McGrew, J. H. (2020). Implementation fidelity and common elements of high quality teaching sequences for students with ASD in COMPASS. *Research in ASDs*, 71, 101493. <a href="https://doi.org/10.1016/j.rasd.2019.101493">https://doi.org/10.1016/j.rasd.2019.101493</a>
- Saleem Khasawneh, M. A. (2024). Using information and communication technology as a time management tool among school principals in the secondary stage. Journal of Infrastructure, Policy and Development, 8(7), 4799. <a href="https://doi.org/10.24294/jipd.v8i7.4799">https://doi.org/10.24294/jipd.v8i7.4799</a>

- Saleem Khasawneh, M. A. (2024). The level of availability of environmental facilities in public schools and their role in the academic performance of students with disabilities. *Journal of Educational and Social Research*, 14(3), 124. https://doi.org/10.36941/jesr-2024-0061
- Salman, O. K., Khasawneh, Y. J., Alqudah, H., Alwaely, S. A., & Khasawneh, M. A. (2024). Tailoring gamification to individual learners: A study on personalization variables for skill enhancement. *International Journal of Data and Network Science*, 8(2), 789-796. https://doi.org/10.5267/j.ijdns.2023.12.025
- Seok, S., DaCosta, B., & Hodges, R. (2018). A systematic review of empirically based universal design for learning: Implementation and effectiveness of universal design in education for students with and without disabilities at the postsecondary level. *Open Journal of Social Sciences*, 6(05), 171.
- Shater, A., AlMahdawi, A. J., & Khasawneh, M. A. S. (2023). The Digital Learning of Disabled Students: Perceptions of Teachers in Public Schools. *Inf. Sci. Letters. Int. J*, 12, 879-887.
- Shater, A., Bani-Rshaid, A. M., Al-Fayoumi, M. M., Al-Shaar, A. S., Bukhamseen, A. M., & Khasawneh, M. A. (2023). Peer-mediated intervention through Snapchat: Enhancing social interactions among students with autism. *International Journal of Data and Network Science*, 7(4), 2083-2088. <a href="https://doi.org/10.5267/j.ijdns.2023.10.101">https://doi.org/10.5267/j.ijdns.2023.10.101</a>
- Shawaqfeh, A. T., & Khasawneh, M. A. (2023). Incorporating corpus linguistics tools in the training and professional development of lecturers in translation studies. *Studies in Media and Communication*, 11(7), 260. <a href="https://doi.org/10.11114/smc.v11i7.6379">https://doi.org/10.11114/smc.v11i7.6379</a>
- Shawaqfeh, A. T., Jameel, A. S., Al-adwan, L. A., & Khasawneh, M. A. (2023). Interaction as a mechanism to enhance English language proficiency in the classroom. *Journal of Language Teaching and Research*, 15(1), 229-234. https://doi.org/10.17507/jltr.1501.25
- Sreeparvathy, M., & Udayan, S. A. (2022). Changing Times and Changes in the English Language; The Impact of Internet and Internet Language on Standard English Language. *Special Education*, 2(43).
- Stark, M. D., & Lindo, E. J. (2022). Executive Functioning Supports for College Students with an ASD. Review Journal of Autism and Developmental Disorders. https://doi.org/10.1007/s40489-022-00311-z
- Tran, C. V., & Weiss, B. (2018). Characteristics of agencies providing support services for children with ASDs in Vietnam. *International Journal of Social Science and Humanity*, 8, 116-121. <a href="https://doi:10.18178/ijssh.2018.V8.946">https://doi:10.18178/ijssh.2018.V8.946</a>
- Tran, C. V., Pham, M. M., Mai, P. T., Le, T. T., & Nguyen, D. T. (2020). Inclusive Education for Students with ASD in Elementary Schools in Vietnam: The Current Situation and Solutions. *International Electronic Journal of Elementary Education*, 12(3), 265–273. <a href="https://doi.org/10.26822/iejee.2020358220">https://doi.org/10.26822/iejee.2020358220</a>
- Waddington, E. M., & Reed, P. (2017). Comparison of the ef¬fects of mainstream and special school on national curriculum outcomes in children with ASD: An archive-based analysis. *Journal of Research in Special Educational Needs*, 17, 132-142. https://doi:10.1111/1471-3802.12368
- Wafa'A, H., & Khasawneh, M. A. S. (2024). The Correlation Between the Use of YouTube Short Videos to Enhance Foreign Language Reading and Writing Proficiency, and the Academic Performance of Undergraduates. *Eurasian Journal of Educational Research*, 109(109), 1-13.
- Wilson, K. P., & Landa, R. J. (2019). Barriers to educator im¬plementation of a classroom-based intervention for preschoolers with ASD. *Frontiers in Education*, 4, Article 27. <a href="https://doi:10.3389/feduc.2019.00027">https://doi:10.3389/feduc.2019.00027</a>
- Yaser, N. A. S., Samar, A. J., Firas, A. S. A. T., & Mohamad, A. S. K. (2022). Using Social Media Network by Special Education Teachers. *International Journal of Cognitive Research in Science, Engineering and Education*, 10(2), 39-50. https://doi: 10.23947/2334-8496-2022-10-2-39-50
- Yaser, N. A. S., Samar, A. J., Firas, A. S. A. T., & Mohamad, M.A.S. (2022). USING SOCIAL MEDIA NETWORK BY SPECIAL EDUCATION TEACHERS. *International Journal of Cognitive Research in Science, Engineering and Education*, 10(2), 39-50. DOI: 10.23947/2334-8496-2022-10-2-39-50
- Zaghlool, Z. D., & Khasawneh, M. A. (2023). Aligning translation curricula with technological advancements; Insights from artificial intelligence researchers and language educators. *Studies in Media and Communication*, 12(1), 58. https://doi.org/10.11114/smc.v12i1.6378
- Zehner, A., Chen, X., & Aladsani, M. (2017). Implementing Universal Design for Learning in Classrooms with Minorities with Autism. *Journal of Childhood & Developmental Disorders*, 03(02). <a href="https://doi.org/10.4172/2472-1786.100048">https://doi.org/10.4172/2472-1786.100048</a>