Developing Social and Emotional Skills of Students with Learning Difficulties using a Digital Learning Program

Abdullah Ahmed Almulla[1], Mohamad Ahmad Saleem Khasawneh[2]

Abstract

This study investigated the impact of using a digital learning program on the development of social and emotional skills among students with learning disabilities in Irbid City, Jordan. Using an experimental design, this research examined how changing one or more independent factors affected the dependent variable. The sampling method we used was a stochastic one. To take part in the research, we randomly chose two classrooms. One classroom served as the experimental group and the other as the control group; with 20 pupils each. There was a significant difference in the average scores for life skills, which include social skills, independent skills, and emotional capacities, between the control and experimental groups. The results suggest that the students in the experimental group possess a substantial amount of practical life skills. The findings provide credence to the idea that students with learning disabilities may benefit from digital learning technologies by increasing their social, emotional, and self-reliance capabilities and hence their adaptive capacities.

Keywords: *Digital learning; social skills; emotional skills; students with learning disabilities; Irbid governorate.*

Introduction

Modern educational institutions in this age of profound global change cannot limit themselves to imparting rote academic information to pupils; rather, they must help students develop a well-rounded set of abilities in these areas if they are to achieve personal success and happiness. In order to help students, overcome obstacles both now and in the future, schools should focus on building their self-esteem and confidence (Al Rawashdeh et al., 2021). It is crucial for people, groups, and society as a whole to acquire social and emotional abilities. Soft skills, such as the capacity to adapt to new situations with ease, to respect one's own and other people's dignity, to build and sustain positive relationships within one's community, to demonstrate creativity, and to make responsible and ethical decisions, are now crucial for a country's success. According to Rodrigues et al. (2019), a variety of digital technologies have been used to aid in the teaching of students with learning difficulties. This includes modern technological tools for education that have made great strides in improving teaching and learning and have effectively permeated classrooms at all levels. Given that most nations' signed accords recognise the reality of learning disabilities, this is of the utmost importance (Malik, 2018). Given the significance of learning problems, investing in people has the potential to promote social well-being. The normal process of cognitive acquisition is hindered by this condition. Memory, perception, attention, reasoning, learning strategies, and the processing of spoken and written language resources are all impacted by this disorder, which in turn impacts the learning process (Gilar-Corbí et al., 2018).

Children with developmental learning disorders can struggle mightily in school, particularly in areas where proficiency is required, such as mathematics, which play an essential role in today's world. Individuals' lives are impacted in five different ways by low numeracy (Purwanto, 2020). The effects on children's academic performance, psychological well-being, and sense of self-worth are detrimental. In addition, it compromises an individual's freedom in day-to-day activities and narrows their variety of employment options in adulthood. Developmental paths and causes of mathematical failure are also topics of open discussion (Murano et al., 2020). Nonetheless, there are writers who believe that children from economically, culturally, or environmentally disadvantaged backgrounds are more likely to have poor mathematics performance in school, especially if they have a neurological predisposition to deficiencies in numerical processing. Upon confirmation of such contextual elements, children are deemed to be "at risk" for displaying arithmetic challenges.

---

[1]Ph.D. in Special Education, Assistant Professor, Special Education Department, King Faisal University, Hofuf 31982, Saudi Arabia. Email: aamulla@kfu.edu.sa, https://orcid.org/0009-0004-6920-8421

[2] Assistant Professor, Special Education Department, King Khalid University, Saudi Arabia, Email: mkhasawneh@kku.edu.sa. https://orcid.org/0000-0002-1390-3765.

According to Gherheş et al. (2021), digital technologies are crucial for improving the skills of educators and their pupils. Additionally, they brought attention to the positive impact that educational technology has on making learning easier. In order to improve learning, interactive activities should encourage efficient communication, pay attention to students' needs and interests, and provide a variety of learning opportunities. Furthermore, they facilitate the reduction of learning-related time and effort. Students who use digital learning tools are more creative and learn faster (El-Sabagh, 2021). Their mathematical abilities are on the rise, and they spend a lot of time on computers for things like homework, gaming, and chatting with friends online. As a result, they see dramatic improvements in their academic performance. Students are helped in their learning process by multimedia-based digital learning tools that provide entertaining courses and activities. So, the digital world is slowly but surely making its way into the domain of education and competencies; life skills are among the proficiencies that may be improved utilising digital learning technologies (Dinh & Nguyen, 2020).

Teachers' familiarity with and comfort with using technology in the classroom are crucial factors in the success or failure of such initiatives. Teachers' perspectives on the efficacy of assistive technology for students with particular learning difficulties must be a primary area of research. Therefore, this study aims to identify the role of digital tools in advancing the social and emotional skills of students with learning disabilities.

Research Questions

The study attempted to provide answers to the following questions:

1. Is there an impact of using digital learning technology to develop the social and emotional skills of students with learning disabilities in Irbid City?
2. Are there differences between the scores in the post-test and follow-up tests after applying the program that uses digital learning technology to develop the social and emotional skills of students with learning disabilities in Irbid City?

Literature Review

The process of learning include obtaining fresh information and abilities. In the first few years of life, kids acquire the basics of reading, writing, and arithmetic at their own pace and ability. It seems, however, that some youngsters, although having typical cognitive ability and physical, auditory, or visual talents, are uniquely unable to learn language and mathematics, even when presented with sufficient learning chances. Learning difficulties include a vast array of manifestations. Students with learning disabilities often struggle in reading, writing, and basic math because of the impact on their cognitive processes. However, these students can have difficulties in other areas of school and in their social and emotional development as a whole (Lytra & Drigas, 2021).

Dyslexia is the reading disability that affects the vast majority of children with learning impairments. Typically, it impacts kids' sound recognition and manipulation skills, along with their decoding and word recognition abilities. This disorder makes it hard for children to develop the skills necessary to read fluently and properly. Students with learning difficulties also often struggle in the area of writing, a condition known as dysgraphia (Drane et al., 2020; Aqilah & Taneepanichskul, 2024). Dysgraphia is a developmental disorder that affects the organisation and expression of ideas in writing in children. The ability to write legibly, type accurately, and spell correctly are all affected. Disabilities in remembering and appropriately applying arithmetic problem stages (dyscalculia) are another kind of learning difficulty. Challenges with direction, size, spatial connections, place value, fractions, time, and memorization of mathematical information are among the specific issues that may arise (Händel et al., 2020).

In order to address the variety of students, inclusive education aims to decrease exclusion from school and increase participation in classroom activities. Meeting the different needs of children in mainstream settings in a responsive, courteous, and helpful way is the essence of inclusive education, which guarantees that all students get a quality education (Mystakidis et al., 2021). The goal of mainstream schools is to provide a high-quality education to all students, including those with special needs, and to integrate them into regular classrooms alongside their typically developing classmates. The right to lifelong learning, the right to not be excluded from mainstream education because of one's disability, and the right to access education

without discrimination are all highlighted in the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2006). Providing the greatest available facilities for all children with disabilities in the most suitable environment is the principal objective of education for children with disabilities. The ultimate goal is for these children to achieve the highest possible level of education in a mainstream context (Agormedah et al., 2020).

Digital Learning

Students' drive to study and capacity for self-directed learning are both favourably impacted by the use of digital learning tools, which allow them to acquire new information more easily. In addition to helping students become better communicators, it places an emphasis on learning via group projects and discussions (Al Rawashdeh et al., 2021). Additionally, this technology has a positive impact on educators as it allows them to include a variety of instructional methods and improve Teachers who have invested in their own professional growth and who are experts in their subjects are also accessible and flexible, letting students study whenever and wherever they choose. It is vital for students to understand the extensive information imparted to them throughout their time in school and to build the tech skills they'll need for the future. recognises the importance of digital technology in education by highlighting the merits of independent study and encouraging students to develop their own unique abilities in these areas (Rodrigues et al., 2019).

Working group members are motivated to constantly improve their knowledge and skills in order to stay up with the ever-changing field, which is driven by society's increasing recognition of the significance of lifelong learning and attending conferences on a global scale. These days, people value speed and efficiency above all else (Malik, 2018). Many people who, for various reasons, were unable to finish high school or college would want to return to school and finish what they started. Because there aren't enough schools, students have to squeeze into too small of a space, and schools are disproportionately located in very densely populated locations. The expense of higher education must also be decreased. Assistive technology enables students with disabilities to enhance their access to the curriculum and improve the quality of their learning experience. Various assistive technology gadgets may aid instructors in enhancing the functional capacities of their pupils, hence promoting their engagement in learning opportunities and involvement in activities (Gilar-Corbí et al., 2018). Computer-assisted instructions include a range of software tools designed to help youngsters improve their academic performance and reach their full potential. The technologies include a spectrum, spanning from basic spellcheckers to intricate voice recognition systems and instructional applications. Software such as voice recognition, word prediction, spell checking, and maths software have been proven to effectively meet the requirements of children with unique learning difficulties (Murano et al., 2020).

The primary duty of a teacher is to ensure that students, irrespective of their impairments, have fruitful learning experiences that enable them to achieve their aspirations for a promising future. Hence, it is essential for instructors to use appropriate technology tools for these pupils and determine the most efficient means of providing these gadgets, including the individuals involved, the location, and the timing (Dinh & Nguyen, 2020). They possess the expertise in teaching methodologies and curriculum development tailored to the specific requirements of students, which are crucial factors in children's academic achievement. Nevertheless, instructors still experience concern due to the lack of appropriate knowledge and pedagogical tools for effectively incorporating assistive technology into the regular curriculum. In order to effectively use and advance digital learning activities, it is crucial to have skilled digital abilities. Digital capabilities include the proficiencies and aptitudes necessary for humans to efficiently operate and excel in a society that significantly depends on digital technology. In addition to acquiring digital skills in comprehending, utilising, creating, and distributing digital technologies, there are certain attributes that need to be developed in order to become a skilled digital professional. Here are many factors for you to contemplate (Händel et al., 2020). To harness digital learning and its many applications: Employing innovative and adaptable learning technology, while avoiding dependence on predetermined approaches. Adaptation involves intentionally choosing activities that actively help to the process of learning and teaching. Investigation and study: Employing educational resources to aid learners in structuring and supervising their own learning process, as well as discovering and nurturing their skills. Collaborative work:

Proficiency To ensure the successful development and use of efficient strategies both inside and outside the educational institution, it is crucial to actively participate in cooperation and integrate innovative concepts (Mystakidis et al., 2021).

Social and Emotional Skills

A lot of people think that people should work on honing their life skills and incorporating them into their psyche for the sake of their development and happiness. Acquiring life skills is critical for success since they are key tools that boost cognitive capacities in personal, professional, and social circumstances (Al-Shammari & Ahmed, 2022). The ability to adapt to different people and overcome different challenges in life is what the literature means when it talks about life skills. These challenges and demands might vary depending on the culture and environment in which one lives. It is the process by which an individual deals with life's difficulties. One method for fostering the growth of one's social and emotional competencies is the field known as social and emotional learning, or SEL. Students' improved academic achievement and, more significantly, their prosperous and fulfilling lives may be traced back to SEL. Social and Emotional Learning can be defined as the acquisition of fundamental skills to identify and regulate emotions, establish and achieve positive objectives, understand and respect different viewpoints, establish and nurture healthy relationships, make responsible choices, and effectively navigate interpersonal situations (Alenezi, 2021).

Acquiring life skills is essential for achieving educational goals. They represent the ultimate outcomes of human knowledge acquisition, as they assist individuals in efficiently navigating their lives, achieving personal and social balance, and adjusting to external influences and the challenges of life. Furthermore, they empower him to take personal and societal responsibility and efficiently overcome the obstacles he faces. Moreover, they cultivate self-confidence in him and enhance his capacity to initiate action. Utilising proficient communication abilities in many situations and interpersonal exchanges with others. These abilities promote human development and improve efficiency, leading to advantages for both people and their communities. Moreover, acquiring these talents offers learners the chance to enhance their social and living circumstances, especially in a highly technology culture where such skills are becoming more and more essential (Alenezi, et al., 2023).

The recognition of the evolving role of educational institutions compared to their former function is vital. The current purpose of the institution is to educate students who possess a lifelong desire for learning, enabling them to adapt to changes in their lives, achieve personal growth, and integrate into society. Additionally, the institution aims to cultivate the cognitive abilities required to solve issues and produce information in a stimulating atmosphere. The program's objective is to provide students a variety of authentic experiences and tangible skills. Institutions prioritise education and instill a set of sophisticated ideas among pupils (Agormedah et al., 2020). The only method to accomplish all of this is to include modern instructional methodologies and exercises. To keep pace with the current day, the educational institution must use modern resources such as computer games, cellphones, the Internet, physical activity, and practical application in its teaching methods. By leveraging the existing gadgets, the utilisation of these technologies ensures a heightened level of student participation in mobile teaching. Some people consider mobile education to be an example of lifelong learning, where students acquire useful experiences (Gherheş et al. 2021).

To develop an outstanding generation of learners who have the essential skills to navigate their future, it is crucial that we incorporate three key elements of learning: the learner's inclination towards thoughtful involvement, proficient use of technology, and acquisition of vital life skills. He explained the importance of using technology efficiently, highlighting its function as a tool. To ensure effective and adequate learning outcomes, educators must integrate students' understanding and use of technology into the framework of instructional sessions, therefore improving comprehension and control of information. Life skills enable students to develop and enhance their personal and professional qualities by providing them with relevant chances for engagement. By effectively using technology, educators can design classroom programmes that allow students to take responsibility for their work, be accountable for their results, think about the consequences of their actions, and reflect on how these experiences can help them develop important life skills. This approach helps prepare learners and citizens for the challenges of the 21st century (Murano et al., 2020; Aren & Hamamci, 2023).

Previous Studies

Ovcharuk et al. (2020) focused on the examination and evaluation of how teachers in European nations (such as Germany, Italy, Netherlands, Denmark, Estonia, Croatia, Sweden, Finland, Macedonia, Norway, and others) use digital resources in their professional work. The article uncovers the online resources that promote the development of a sustainable environment for teachers and students. These resources focus on important competency areas such as entrepreneurship, citizenship, civic education, and STEM. The available resources facilitate the innovative utilisation of digital technology, discerning the requirements of both instructors and pupils, and discovering technological solutions to address these demands. Additionally, they aid in resolving technical issues and identifying areas where digital proficiency may be lacking. By analysing available resources, teachers gain an understanding of the importance of enhancing and modernising their digital skills. The purpose is to showcase instances of European instructors using digital resources to establish a digital atmosphere, enhance digital proficiency, and introduce innovative methods in the educational process. Utilising offered experience in a comparative context may significantly enhance domestic teaching practice and contribute to the professional development of instructors.

In 2019, Al-Qahtani looked at how kindergarteners in the Tabuk area were taught important life skills. The study's overarching goal was to determine which general and specialised life skills should be emphasised throughout kindergarten in this location. Thirty kids, ranging in age from five to six, who were found to be lacking in certain life skills were part of the research team. The cognitive components of these abilities were evaluated using visual accomplishment test instruments. I made use of a note card in order to gauge several areas of performance. The data was also gathered by a descriptive and quasi-experimental method in an online learning environment that mixed educational gaming stimuli with interactive activities. After administering the graphical accomplishment exam and the performance note card for life skills, the study's most noteworthy discovery was the existence of statistically significant disparities across the three groups. The third set of experimenters had more success since they received both digital and interactive cues.

Hussein (2020) looked at how different methods of offering performance support in virtual learning tours affected students' growth in health awareness. Fifty kindergarteners made up the sample. Using a quasi-experimental approach, data was obtained using the Life Skills Scale and the Life Skills Programme. According to the findings, the experimental group fared better than the control group in terms of average scores after the programme. The programme also significantly raised kids' health consciousness. In addition, the experimental group's average scores were significantly different before and after the programme, with the post-measurement showing a clear advantage. The program's impact on health awareness is clear, and its recommendations include the need of educating youngsters about the necessity of taking a range of demographic-specific approaches to health.

The effectiveness of a programme based on digital learning technology in developing early children's life skills was studied by Alshammari and Ahmed (2022). The research used a quasi-experimental approach and included sixty students in the second grade of a primary school, with ages ranging from seven to eight years old. Two groups, one experimental and one control, were randomly allocated to the kids. A programme that uses digital learning technologies to promote life skills and the Draw-a-Person test were used as research tools. The life skills scale for early children was also used. The experimental group was the only one to get the programme; the control group's children received the old-fashioned method. After analysing the results, researchers concluded that a programme using digital learning methodologies helped kids improve their life skills after its adoption.

Digital storytelling has the potential to help children with mild disabilities acquire important life skills, according to research by Abdel Aziz et al. (2020). The ages of the 30 male and female adolescents included in the sample ranged from 8 to 10, and they were all participants in educational inclusion programmes. Notational cards and a set of skills were the tools used. The data for the achievement test and performance note card were collected using a descriptive analytical and quasi-experimental technique for children with modest mental impairments. The study group students' average scores differed significantly between the

pre- and post-tests, which is a noteworthy observation. Both the accomplishment exam and the performance note card showed improved results in the post-test.

Method and Procedure

Using an experimental design, this research examined how changing one or more independent factors affected the dependent variable. The results were documented after careful evaluation. To measure the effects on the participants, the researcher in this study used both conventional methods and digital learning technology. Two groups were used in the research; one group was taught using a programme that used digital learning technology, while the other group was taught using more conventional methods.

Population and Sample

The 705 students who were enrolled in Irbid Governorate before it was divided into 170 schools make up the study population. The sampling method we used was a stochastic one. To take part in the research, we randomly chose two classrooms. One classroom served as the experimental group and the other as the control group; 20 pupils each. The assignment was done at random.

Research Instrument

The study used two instruments to achieve the objectives of the research.

First: The Instructional Program

A curriculum designed with an educational project's use of digital learning technology in mind: Children with learning difficulties attending Abha schools were the focus of this research, which aimed to improve their acquisition of fundamental life skills. The target completion date for this research was the 2023–2024 school year. An initial set of 28 behavioural objectives was generated after a thorough evaluation of the experiment's primary aims and the relevant information about the topics under study. The several parts that make up the framework are as follows: evaluation, synthesis, usage, recall, and understanding. Experts and professionals on staff checked the data for accuracy and completeness. Although there was still a total of 28 goals, their specific wording was changed based on the comments made. The two groups used different approaches to lesson planning; one used digital learning to supplement the experimental group, while the other stuck to more conventional methods. There were a lot of examples given to the panel of educational strategy experts to review. The purpose of giving them this task was to see how well they were following the established behavioural goals and the material at hand. The final version was produced after extensive modifications to several paragraphs that included expert feedback. In all, 28 separate lesson plans were developed and implemented, with the two approaches used by the two sets of students. To be more precise, out of a total of 28 programmes, half used a digital learning-based instructional programme and half used a more conventional method.

Second: The Test of Social and Emotional Skills

Improving pupils' life skills via the development of an evaluation tool: The purpose of the research was to determine if the experimental items had any effect on the adaptive ability of students who were having difficulty learning. In a broad sense, life skills include the capacity to interact with others, manage one's own time and emotions, and rely on one's own resources. The exam items are thoughtfully crafted to convey the goal and evaluate practical skills in accordance with the standards established by current academic research. A digital learning-oriented instructional project was included in the test, the majority of which were multiple-choice questions. Based on a subscale that was specifically developed to improve life skills, the items were selected. The questions in the set are structured with an opening statement and four potential replies for each. The students are tasked with choosing the correct answer. There are twenty-one different parts to the test.

Instrument Validity and Reliability

The dependability of the instrument was assessed by using two different methodologies, which are now as follows:

1. The review of the instrument requires the participation of a panel that is comprised of eight arbitrators. These arbitrators will evaluate the instrument and decide a threshold of eighty percent acceptance rate. 2. An investigation of the degree of discriminant validity shown by 10 students was carried out. It was established that the observed (F) values of 5.10, 5.40, and 5.60 were sufficient to establish the statistical significance of the discriminant validity of the coefficients. The instrument's internal consistency was evaluated using Cronbach's alpha, which was used to examine the instrument. With a score of 0.835, the instrument demonstrated an impressively high level of reliability overall. Dependability coefficients range from 0.821 to 0.852 for each of the criteria that are being considered.

Statistical Analysis

Following the completion of the data collecting process, the average and standard deviation of the scores obtained on the pre-test and the post-test were calculated. Through the use of the Eta square, we were able to compute the impact size, which provides insight into the degree to which the utilisation of digital learning technology assists students with learning difficulties in the development of their functional skills. In order to provide a more detailed explanation for the discrepancies that exist between two samples that are of comparable characteristics, statistical procedures such as Wilcoxon's test and Z-value were used.

Results and Discussion

The results shown in Table 1 demonstrate that the social and emotional skills of children with learning disabilities in both the control group and the experimental group were comparable prior to the adoption of an instructional programme that used digital learning technologies.

Table 1. Results of the pre-test for the social and emotional skills.

Dimensions	Groups	N	M/R	S/R
Social skills	Experimental	20	17.30	270.80
	Control	20	17.50	240.00
Independence skills	Experimental	20	16.80	240.80
	Control	20	16.70	255.20
Emotional skills	Experimental	20	15.30	231.80
	Control	20	15.50	243.00
Total	Experimental	20	16.50	250.00
	Control	20	16.60	250.60

Table 1 shows that the two groups' mean scores on the pre-test of life skills were identical across several areas; no statistically significant difference was found between the two groups of students.

Table 2. results of the post-test.

Dimensions	Group	N	M/R	S/R
Social skills	Experimental	20	23.20	323.20
	Control	20	17.30	244.80
Independence skills	Experimental	20	24.00	320.00
	Control	20	18.20	259.20
Emotional skills	Experimental	20	24.50	328.00
	Control	20	16.30	244.80
Total	Experimental	20	24.20	323.20
	Control	20	16.60	249.60

Table 2 displays the outcomes of the post-test for the experimental group. There was a significant difference in the average scores for life skills, which include social skills, independent skills, and emotional capacities, between the control and experimental groups. The results suggest that the students in the experimental group possess a substantial amount of practical life skills.

Technology such as multimedia, iPads, projectors, interactive educational games, and activities that engage all of the students' senses were introduced in a way that the researcher believes led to this result. Through the use of the offered methodologies, the students were exposed to a variety of settings, which greatly aided their ability to independently acquire new abilities. Students were able to study in an environment that was conducive to their comfort, freedom, and flexibility as a result of the many engaging methods in which the skills were taught. Students' degree of participation in the learning process is directly influenced by how the activity is carried out, which is the student's responsibility. Research conducted by Alshammari and Ahmed (2022) lends credence to this claim by demonstrating the usefulness of electronic technology in this context. Students have greater freedom to learn when and when it is most convenient for them, set their own study goals, and manage the speed, sequencing, and development of their presentations in this more flexible setting. The incorporation of interactive features in instructional activities and games is also attributed by the researcher to this phenomena. All of these things have made kids even more excited and driven to study, grow professionally, and interact socially with their classmates. As a result, the kids are much more sociable and willing to work together now.

The study also gives credit to the instructional content's approaches for sparking students' interest in learning. By shifting the focus away from narrated lessons and indoctrination, these methods provide pupils with age-appropriate activities. Additionally, they aid in the removal of educational roadblocks by using visual and auditory stimuli that are visually appealing and dynamic, and by providing feedback on whether or not a student has answered correctly. Giving the student plenty of chances to do it again, see where they went wrong, and fix it can help them learn more. Furthermore, this satisfies the needs of the digital age and caters to the present generation's need for continual interaction with electronic gadgets, which brings energy and pleasure to the learning process. Congruence between digital technology and the substance of life skills—which includes social, independent, and emotional skills—also contributes to the result. Students may benefit from these talents since they are relevant to their everyday lives, build on what they already know, and are well-versed in the fundamental principles. Also, pupils learn the skills in chunks that are interdependent and include a lot of different parts. Motivating students to continue in their learning and achieve active engagement, engaging them in a variety of engaging activities that provide continuing feedback improves their memory recall. According to previous research by Hussein (2020), Al-Qahtani (2019), Alshammari and Ahmed (2022), and Abdel Aziz et al. (2020), this finding fits the bill.

Finally, while evaluating a program's effectiveness in enhancing students' life skills via the use of digital learning technologies, we want to know whether there was a statistically significant change between the post-test and follow-up test scores. It is critical to respond quickly to the present query so that a meaningful answer may be provided. The table displays the results.

Table 3. Results of the differences in students' score in the post and follow-up test.

Dimensions	M/R	S/R	F value	Sig.
Social skills	7.20	88.80	13.30	0.130
	0.00	0.00		
Independence skills	7.20	88.80	10.80	0.090
	0.00	0.00		
Emotional skills	7.20	88.80	12.10	0.120
	0.00	0.00		
Total	7.20	88.80	12.00	0.110
	0.00	0.00		

The results show that the experimental group's mean scores did not change significantly between the post-test and follow-up evaluations (Table 3). Instead of declining after the programme was stopped, the research found that the program's effectiveness stayed the same throughout the post-intervention term.

The findings provide credence to the idea that students with learning disabilities may benefit from digital learning technologies by increasing their social, emotional, and self-reliance capabilities and hence their adaptive capacities. Therefore, the previously reported outcomes for the individuals in question did not show a discernible decline. By strengthening the connection between newly taught concepts and previously understood ones, programmes that use digital learning tools also facilitate lifelong learning. Students are

less likely to quit abruptly or too soon if they are given opportunities to practise and improve their cognitive and practical skills in a variety of contexts prescribed by the curriculum, according to the hypothesis. The research' results corroborated educators' worries about students' inadequate access to useful assistive technology in the classroom. One challenge that instructors have when trying to make good use of electronic gadgets is a lack of resources. The onus for ensuring that students with special needs have access to all the resources they need to thrive academically is on the school administration.

Conclusion

Students with learning disabilities may benefit from digital learning technologies in terms of improving their living skills, according to this study's conclusions. Therefore, a crucial component is the degree to which students' capacity to acquire practical skills, create abstract mental models through different means, and perform exceptionally well on tests that measure all facets of practical abilities has been enhanced by digital learning technology. The result was that they outperformed the control group, who had just heard the signals, in terms of overall performance. Then, apart from the many other tasks involved in conceptual mental representation and cognitive processing, answer the particular sequence of questions that follow.

Acknowledgments

References

Abdel Aziz., M. Al-Abd, H., & Al-Lu'a, N. (2020). The impact of using digital stories on developing some life skills among children with mild disabilities, *Egypt. College of Education Journal, 2 (3)*, 119-138.

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: http://dx.doi.org/10.18576/isl/110640

Agormedah, E. K., Henaku, E. A., Ayite, D. M. K., & Ansah, E. A. (2020). Online learning in higher education during COVID-19 pandemic: A case of Ghana. *Journal of Educational Technology and Online Learning*, *3*(3), 183-210.

Ahmad Saleem Khasawneh, M. (2024). The efficacy of a programme 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. https://doi.org/10.26803/ijlter.23.4.2

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 Rawashdeh, A. Z., Mohammed, E. Y., Al Arab, A. R., Alara, M., & Al-Rawashdeh, B. (2021). Advantages and disadvantages of using e-learning in university education: Analyzing students' perspectives. *Electronic Journal of E-learning*, *19*(3), 107-117.

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. https://doi.org/10.52291/ijse.2023.38.24

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. https://doi.org/10.24857/rgsa.v17n7-0

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. https://doi.org/10.5267/j.ijdns.2023.10.100

Alenezi, M. (2021). Deep dive into digital transformation in higher education institutions. *Education Sciences*, *11*(12), 770.

Alenezi, M., Wardat, S., & Akour, M. (2023). The Need of Integrating Digital Education in Higher Education: Challenges and Opportunities. *Sustainability*, *15*(6), 4782.

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.

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

Aqilah, S., & Taneepanichskul, N. (2024). Ethnicity, physical activity, and the dietary intake of boarding high school students: A photovoice mixed method study. *International Journal of Innovative Research and Scientific Studies,* 7(2), 354–365. https://doi.org/10.53894/ijirss.v7i2.2628

Aren, S., & Hamamci, H. N. (2023). The moderating effect of subjective financial literacy on the relationship between coping strategies and financial risk tolerance . *International Journal of Social Sciences Perspectives*, 12(1), 28–40. https://doi.org/10.33094/ijssp.v12i1.733

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. https://doi.org/10.5267/j.ijdns.2024.2.019

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. https://doi.org/10.5267/j.ijdns.2023.10.018

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), 133-151.

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. https://doi.org/10.26803/ijlter.23.1.5

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.

Al-Qahtani, K. (2019). *Designing an e-learning environment based on combining stimulating interactive activities and digital games to develop some life skills among kindergarten children in the Tabuk region* (Master's thesis).

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. https://doi.org/10.5267/j.ijdns.2024.3.019

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. https://doi.org/10.18576/isl/120335

Al-Shammari, M. & Ahmed, N. (2022). The effectiveness of a program based on the use of digital learning techniques in developing life skills in early childhood. *Arab Journal of Child Media and Culture, 5*(21), 119-170.

Alsmadi, M. K., Al-Marashdeh, I., Alzaqebah, M., Jaradat, G., Alghamdi, F. A., Mohammad, R. M. A., ... & Tayfour, M. (2021). Digitalization of learning in Saudi Arabia during the COVID-19 outbreak: A survey. *Informatics in Medicine Unlocked*, 25, 100632.

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. https://doi.org/10.11114/smc.v12i1.6573

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. https://doi.org/10.11114/smc.v12i1.6573

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. https://doi.org/10.5267/j.ijdns.2023.11.011

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. https://doi.org/10.24857/rgsa.v17n7-022

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

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

Dinh, L. P., & Nguyen, T. T. (2020). Pandemic, social distancing, and social work education: Students' satisfaction with online education in Vietnam. *Social Work Education*, *39*(8), 1074-1083.

Drane, C., Vernon, L., & O'Shea, S. (2020). The impact of 'learning at home'on the educational outcomes of vulnerable children in Australia during the COVID-19 pandemic.

El-Sabagh, H. A. (2021). Adaptive e-learning environment based on learning styles and its impact on development students' engagement. *International Journal of Educational Technology in Higher Education*, *18*(1), 53.

Gherheş, V., Stoian, C. E., Fărcaşiu, M. A., & Stanici, M. (2021). E-learning vs. face-to-face learning: Analyzing students' preferences and behaviors. *Sustainability*, *13*(8), 4381.

Gilar-Corbí, R., Pozo-Rico, T., Sánchez, B., & Castejón, J. L. (2018). Can emotional competence be taught in higher education? A randomized experimental study of an emotional intelligence training program using a multimethodological approach. *Frontiers in psychology*, *9*, 1039.

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. http://dx.doi.org/10.18576/isl/110639

Händel, M., Stephan, M., Gläser-Zikuda, M., Kopp, B., Bedenlier, S., & Ziegler, A. (2020). Digital readiness and its effects on higher education students' socio-emotional perceptions in the context of the COVID-19 pandemic. *Journal of Research on Technology in Education*, *54*(2), 267-280.

Hussein, R. (2020). The effect of the method of providing performance support in virtual tours on developing health awareness for kindergarten children. *Journal of Research in Specific Education Fields-JRSEF,* (17).

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

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. https://doi.org/10.1080/1034912X.2021.1995853

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. https://doi.org/http://ijcrr.info/index.php/ijcrr/article/view/924/947.

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). 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. https://doi.org/10.18576/isl/120623

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, 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. https://doi.org/10.5114/hpr.2020.99003

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. https://doi.org/10.26803/ijlter.19.6.16

Khasawneh, M. A. (2023). Digital inclusion: Analyzing social media accessibility features for students with visual impairments. *Studies in Media and Communication*, *12*(1), 71. https://doi.org/10.11114/smc.v12i1.65

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. https://doi.org/10.5267/j.ijdns.2023.10.002.

Khasawneh, M. A. (2024). The challenges facing vocational education online from the teachers' perspectives. *Journal of Curriculum and Teaching*, *13*(2), 180. https://doi.org/10.5430/jct.v13n2p180

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. (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. https://doi.org/10.11114/smc.v12i2.6753

Khasawneh, M. A. S. (2023). The use of video as media in distance learning for deaf students. *Contemporary Educational Technology*, 15(2), ep418. https://doi.org/10.30935/cedtech/13012

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*. https://doi.org/10.26858/ijole.v4i3.14758

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. https://doi.org/10.52291/ijse.2023.38.8

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. https://doi.org/10.20944/preprints202306.0730.v1

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. https://doi.org/10.58346/jowua.2023.i3.014

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. https://doi.org/10.18488/73.v12i1.3591

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. https://doi.org/10.20448/jeelr.v10i3.4841

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. https://doi.org/10.5267/j.ijdns.2023.10.004

Lytra, N., & Drigas, A. (2021). STEAM education-metacognition–specific learning disabilities. *Scientific Electronic Archives*, 14(10).

Malik, R. S. (2018). Educational challenges in 21st century and sustainable development. *Journal of Sustainable Development Education and Research*, 2(1), 9-20.

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

Murano, D., Sawyer, J. E., & Lipnevich, A. A. (2020). A meta-analytic review of preschool social and emotional learning interventions. *Review of Educational Research*, 90(2), 227-263.

Mystakidis, S., Berki, E., & Valtanen, J. P. (2021). Deep and meaningful e-learning with social virtual reality environments in higher education: A systematic literature review. *Applied Sciences*, 11(5), 2412.

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. https://doi.org/10.11114/smc.v12i2.6666

Ovcharuk, O., Ivaniuk, I., Soroko, N., Gritsenchuk, O., & Kravchyna, O. (2020). The use of digital learning tools in the teachers' professional activities to ensure sustainable development and democratization of education in European countries.

Purwanto, A. (2020). University students online learning system during Covid-19 pandemic: Advantages, constraints and solutions. *Sys Rev Pharm*, 11(7), 570-576.

Rodrigues, H., Almeida, F., Figueiredo, V., & Lopes, S. L. (2019). Tracking e-learning through published papers: A systematic review. *Computers & education*, 136, 87-98.

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

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. https://doi.org/10.5267/j.ijdns.2023.10.101

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. https://doi.org/10.11114/smc.v11i7.6379

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

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.

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