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The Efficacy of a Programme Utilizing Digital Learning Technology in Fostering the Life Skills of Students with Learning Disabilities

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Abstract. The main aim of this research was to determine how the effectiveness of a programme that uses digital learning technology enhances the life skills of students who have learning disabilities. The research was conducted over a period of one month on a group of 32 students affiliated to educational institutions in the Governorate of Abha, Saudi Arabia. Sixteen individuals were assigned to each of an the experimental and a control group. The experimental group outperformed the control group on post-tests measuring social skills, independence skills, and emotional skills. There was no statistically significant disparity observed in the life skills scores between the experimental group and the control group at either the follow-up evaluation or the immediate post-intervention phase. The hypothesis posits that students' likelihood of experiencing sudden or premature departure decreases when they have the opportunity to practice and enhance their cognitive and practical abilities across various curriculum-defined situations.

Keywords: Abha Governorate; digital learning technology life skills; students with learning disabilities

1. Introduction

The twenty-first century witnessed an immense and unparalleled scientific and cognitive revolution that included diverse domains of human, natural, and applied sciences. It marked the emergence of novel scientific disciplines that were previously unknown (Kaltsidou, 2022). Education was not exempt from this progress; indeed, it was one of the disciplines most impacted and shaped by it, prompting educators to be highly attentive. Within the realm of learning disabilities (LD), the incorporation of diverse digital technologies has emerged to support the educational process (Sailer, et al., 2021), encompassing contemporary educational technologies that have successfully penetrated students' education across different levels and contributed significantly to the advancement of the

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educational process. This is particularly crucial considering that the existence of learning disabilities is acknowledged in numerous agreements ratified by the majority of countries worldwide (Backfisch, et al., 2021). Given the impact of learning disabilities and the probability of such disabilities impeding the typical cognitive acquisition process, investing in individuals can potentially enhance societal well-being. Learning disabilities affect various cognitive processes involved in the learning process, including memory, perception, attention, thinking, learning techniques, and the processing of oral and written linguistic resources. Dyslexia and dyscalculia frequently impact reading, writing (including spelling, written expression, and handwriting), and mathematics. Additional forms of learning are also impacted. The Digital Age Forum in 2020 in Saudi Arabia highlighted the need for a digital learning environment that caters to the unique characteristics of students (Alsmadi et al., 2021). It emphasised the importance of implementing cooperative education strategies and adapting them to suit the digital environment. This adaptation is crucial as it plays a significant role in improving social skills and enhancing the quality of electronic applications. The forum also emphasised the inclusion of group programmes and games to foster growth. Social opportunities are available for students at every educational level (Songkram, et al., 2023).

Meier (2021) emphasised the significance of digital technologies in enhancing the abilities of both students and teachers and highlighted the useful influence of educational technology in facilitating the learning process. According to Al-Qahtani (2019), interactive activities enhance learning by promoting effective communication, being attentive to learners' needs and interests, and providing different learning opportunities. Additionally, they help save the time and effort required for learning. Students who utilize digital learning methods demonstrate enhanced learning speed and increased innovation. They exhibit improved arithmetic skills and actively engage in various computer-based activities such as completing schoolwork, playing games, and communicating with friends through social networks. Consequently, their academic performance improves significantly.

Multimedia-based digital learning tools facilitate enjoyable lessons and games, thereby aiding students in their learning process. The realm of education and competencies is being progressively infiltrated by the digital realm, and life skills are among the proficiencies that can be enhanced using digital learning technology (Agrawal, et al., 2021). The possess a similarity to digital learning in that they are among the essential components of the abilities required in the twenty-first century, about which we must be cautious in providing to children in this era. Multiple organisations have emphasised the significance of instructing students in digital learning technology and incorporating it into the educational curriculum, as educational institutions play a crucial role in cultivating a generation that is adept at meeting the demands of the contemporary era (Alsmadi, et al., 2021). Several studies have highlighted the significance of incorporating digital learning into students' educational curricula. For instance, Ovcharuk et al. (2020), and Olofsson et al. (2020) all underscored the need for specialised programmes that enhance students' life skills and enrich the curriculum accordingly. Additionally, the studies emphasised the importance of

training teachers to foster students' life skills and offering relevant courses to support this endeavour. The research emphasised the importance of educating the family about the adverse consequences of inadequate life skills and the need to connect these abilities to the real-world situations that the student encounters, both within and outside educational establishments. The research conducted by Fransson et al. (2019) verifies that the rapid pace of changes has had an impact on the organisation of knowledge, the social structure, and the education systems. Consequently, it has become imperative for education to adapt its role to meet the demands of the digital era. This adaptation is necessary to equip learners with the essential skills for navigating a new way of life and to address any deficiencies in their life skills while also fostering their development.

According to Saad (2018), the acquisition of life skills is a significant result of contemporary curricula at all levels of education, and this applies to all disciplines, rather than being limited to a specific subject. Such acquisition is a collective obligation that applies to all specialties, without exception, because education fundamentally involves living among individuals, interacting with them, motivating them to engage in labour, and involving them in the process of development, existence, and the surroundings. The existing curricula are inadequate in equipping students with the necessary abilities to thrive in a quickly changing world, primarily driven by technological advancements. Consequently, there is a significant disparity between individuals' skill sets and the demands of modern living in this century. Permana et al. (2021) assert that the academic curricula supplied to pupils suffer from a noticeable lack of life skills, so it is imperative to enhance and refine this curriculum. A survey study conducted by Ningsih et al. (2023) confirmed the lack of life skills among students with learning disabilities in Saudi Arabia. It is crucial to prioritize the development of these skills, especially for individuals with learning disabilities, as they play a vital role in their overall growth and adaptation to their age.

Considering this perspective, the researcher was eager to create a programme that enhances the life skills of students with learning disabilities. Digital technology has become indispensable in today's world. Assistive technology refers to any object, gadget, or work system that increases or enhances the capacities of individuals with impairments; it is used in a special education environment. People with impairments may benefit from more modern technology like smartphones, and laptops and instructional advice for learning might be effectively provided by these instruments (Humpl & Andersen, 2022). Everyone has a responsibility to help students with special needs obtain the education they need. Interventions including physical exercises, verbal teaching, behavioural support, and metacognitive skills may be provided to children with LD as a kind of service. A student with a moderate to severe impairment is only one of many people who may benefit from assistive technology (Timotheou et al., 2023), and thanks to technology's conveniences, they have little trouble surviving in social situations. The use of digital technology might provide interventions that contribute insight and overcome the obstacles related to them. The goal is to facilitate the integration of those with learning disabilities by equipping students with the necessary skills to effectively navigate various life situations, following contemporary digital learning methods.

Digital learning has experienced significant progress and advancement in the modern era. Various digital learning technologies have emerged to support different types of learners and concepts, which has led to an increased demand for digital learning and a significant improvement in the development of scientific learning skills (Alenezi, et al., 2023). As a result, the acquisition of these skills has become faster as the learning experience is enhanced and tailored to the learner's capabilities. Within the realm of education, the prior designations appeared to lack accuracy and specificity in describing these approaches, while also disregarding the influence of the other senses on the processes of learning and teaching (Alenezi, 2021). Consequently, more inclusive and precise terminology emerged to accurately represent the actuality of the novel teaching methods. The notion of specialised methodologies emerged, along with the concept of illustrative techniques, potentially enhanced by the advancement and integration of electronic and technological tools in the realm of education. Many experts in this subject typically consolidate all these ideas, which have shortcomings in various aspects, to employ a comprehensive notion including all of the aforementioned, known as educational technology (Humpl & Andersen, 2022).

Learning strategies encompass the activities involved in designing, implementing, and assessing the teaching and learning process. The process is comprehensive and intricate, encompassing individuals (workers), methodologies, concepts, tools, and organisations. It involves the analysis of problems, the development of suitable solutions, their implementation, evaluation, and management (Danmuchikwali & Suleiman, 2020). Effective learning occurs when it is intentional, guided, and within reasonable limits. This process involves the administration and growth of the various components of the educational system. Educational resources encompass all materials, tools, and circumstances that are employed to facilitate the comprehension and resolution of uncertainties regarding facts and concepts, hence enhancing the process of acquiring knowledge (Frolova et al., 2020; Qureshi et al., 2021).

The definition of digital learning was elucidated at the inaugural International Scientific Conference on Digital Learning, held 5-6 June 2018, Cape Town, South Africa. Digital learning, also known as e-learning, refers to the transmission of education electronically, either partially or entirely, via a web browser over the Internet or through multimedia platforms (Humpl & Andersen, 2022). This type of learning enables learners to actively engage with the educational content. By engaging with the teacher, either synchronously or asynchronously, the student can acquire knowledge at their convenience, adapting to their circumstances and capabilities. Additionally, they have the opportunity to effectively manage their learning through various media (Timotheou et al., 2023). Fielding and Murcia (2022) defined the system as the provision of a versatile and interactive learning environment using smart devices, their applications, and networks. Utilizing computer systems, their interconnected networks, and various forms of multimedia such as audio, visual content, and graphical elements, along with search functionalities and digital libraries, as well as access to online platforms, the process of acquiring knowledge can occur via devices such as computers, iPads, or mobile phones (Haleem et al., 2022).

Utilizing digital learning facilitates the acquisition of novel knowledge by students, hence positively influencing their motivation to learn and enhancing their ability for self-directed learning. Additionally, digital learning emphasises cooperative and interactive learning while enhancing communication skills (Hillmayr et al., 2020). This technology also has a beneficial influence on teachers, as it assists them in enhancing and diversifying teaching techniques. Characterized by their professional development and expertise in their respective fields, educators also exhibit flexibility and accessibility, enabling students to learn without constraints of time and location. This approach plays a crucial role in learners acquiring the vast quantity of knowledge given to them throughout their years of study, as well as developing the necessary technology skills to prepare for the future (Pettersson, 2021). Sprenger and Schwaninger (2021) elucidated the significance of employing digital technologies in the educational domain by emphasizing the value of self-directed learning and fostering the individual's capacity for critical thinking and creativity.

Digital capabilities refer to the skills and talents that enable individuals to function effectively and thrive in a society that relies heavily on digital technology (Hussein, 2020). For efficient utilization and development of digital learning activities, it is imperative to possess proficient digital skills.

Regarding the establishment and implementation of effective methods within and outside the educational institution, it is important to engage in collaboration and assimilate ideas (Abdel Aziz, 2020). The instructor and learner in digital learning, also known as the electronic teacher and learner or the virtual teacher and learner, play a crucial role in shaping the characteristics of this educational approach. The preceding two phrases have been extensively utilized, but with some misgivings (Kaltsidou, 2022). The teacher's role in planning and developing the educational process is influenced by their job as a researcher, assistant, guide to content and operations, and creator of electronic educational programmes (Sailer et al., 2021). The learner's role is characterized as active and impactful rather than passive owing to their active participation in the educational process, as they are not merely recipients of information. Rather, they actively engage in identifying the materials and tools utilized, as well as exploring ways to employ them effectively. This approach fosters the development of technical abilities and lays the groundwork for cultivating innovative technological thinking. The author highlights his function in using information technology to uncover and cultivate its inventive capacity (Backfisch et al., 2021).

Life skills refer to the ability to effectively adjust to diverse individuals and meet the demands and obstacles of life, which can differ, depending on the surrounding society and environment (Permana et al., 2021). These skills are commonly seen as fundamental abilities that individuals should develop and internalize to enhance their personal growth and well-being, and they are essential tools that enhance cognitive abilities in personal, professional, and social contexts. According to Ningsih et al. (2023), life skills refer to the actions that a person does to effectively manage the challenges of life and acquiring them is crucial for achieving success (Saad, 2018).

Life skills are crucial in attaining educational objectives. They embody the paramount results of human acquisition of knowledge, as they aid the individual in effectively navigating their existence, attaining personal and societal equilibrium, and adapting to environmental factors and the demands of life (Jaya et al., 2018; Saad, 2018). These skills facilitate personal growth and enhance productivity, resulting in benefits for both individuals and their communities. Additionally, these skills provide learners with the opportunity to improve their social and living conditions, particularly in a technologically advanced society where such skills are increasingly necessary (Permana et al., 2021). The following are some of the subskills that make up life skills (Backfisch et al., 2021):

- Social skills: the skill of cooperation and participation; the skill of social etiquette.
- Independence skills: the skill of choosing the appropriate outfit on one's own; the skill of eating on one's own.
- Emotional skills: the skill of expressing emotions (happiness - sadness - anger - crying).

The fact that educational institutions play a different function now than they did in the past must be properly acknowledged. Their present function is to prepare students who are lifelong learners, seeking knowledge, and to prepare them for changes in their lives, self-realization, and social integration, as well as to develop the mental skills necessary to solve problems and generate knowledge in an engaging environment (Ningsih et al., 2023). The programme aims to provide students with a range of real-world experiences and practical skills. Institutions focus particularly on education and inculcate a set of refined ideals among students. The only way to do all of this is to implement contemporary teaching techniques and activities (Jaya et al., 2018). The only remaining option for this educational establishment to stay up to date with the times is to use contemporary tools like computer games, smartphones, the Internet, exercise, and practice while instructing its students. By utilizing the gadgets they already own, the use of these technologies guarantees increased student engagement in mobile education. Accordingly, some regard mobile education as an illustration of life learning, wherein the student gains valuable experience (Abdel Aziz et al., 2020).

To cultivate an exceptional generation of learners who possess the necessary skills to navigate their future world, we must integrate the key elements of learning, namely the learner's inclination towards reflective engagement, proficient use of technology, and acquisition of essential life skills. Al-Qahtani, (2019), and Al-Shammari and Ahmed (2022) elucidate the significance of using technology effectively, emphasizing its role as a tool. Utilizing technology effectively enables the creation of classroom programmes that provide students with opportunities for individuals to assume responsibility for their work, be held accountable for their results, consider the implications of their actions, and reflect on how these experiences can foster the development of life skills; educators can effectively design learning opportunities that align with the goals of preparing learners and citizens for the demands of the 21st century (Abdel Aziz et al., 2020; Pettersson, 2021).

Several studies have explored this topic. Al-Qahtani (2019) investigated the cultivation of life skills in kindergarten children residing in the Tabuk region. The research aimed to identify the specific life skills that should be nurtured at the kindergarten stage in this particular area. The study included a cohort of 30 children, aged 5-6, who exhibited deficits in certain life skills. The study's most important finding was that there were statistically significant differences between the three groups after using both the pictorial achievement test and the performance note card for life skills. The third experimental group, which received a mix of digital and interactive stimuli, did better.

Hussein (2020) investigated the effects of several approaches to providing performance assistance in virtual learning tours on the development of students' health awareness. The results indicated that there were significant differences in the average scores between the experimental and control groups after the programme, favouring the experimental group. The programme's influence on health awareness is evident, and its suggestions encompass the need to cultivate children's health awareness through a variety of educational approaches that cater to distinct demographics.

Alshammari and Ahmed (2022) investigated the efficacy of a digital learning, technology-based programme in fostering early children's life skills. The programme was only implemented with the experimental group, whilst the youngsters in the control group were subjected to the traditional technique. The research and subsequent scrutiny of the outcomes showed that the implementation of a programme using digital learning approaches favourably influenced the enhancement of children's life skills.

Abdel Aziz et al. (2020) studied the impact of using digital storytelling on the development of life skills in children with mild impairments. Their sample comprised 30 male and female adolescents who were enrolled in educational inclusion programmes, with ages ranging from 8 to 10. The instruments of note cards and a compilation of abilities were utilized. The study used a descriptive-analytical and quasi-experimental method to collect data on the achievement test and performance note card for children with mild mental disabilities. One notable finding was a statistically significant difference between the average scores of the research group students in the pre-measurement and post-measurement. The post-measurement showed higher scores on the achievement test and performance note card.

1.1. Research questions

This study seeks to answer the following questions:

1. Are there statistically significant variations in the effectiveness of a programme that uses digital learning technology to develop the life skills of students with learning disabilities between the experimental and control groups?
2. Does the experimental group show notable variations in the effectiveness of a programme that uses digital learning technology to develop the life skills of students with learning disabilities?
3. Is there a statistically significant difference between the scores obtained from post-test and follow-up tests when assessing the effectiveness of a programme

that uses digital learning technology to develop the life skills of students with learning disabilities?

2. Methodology

2.1. Research design

This study employed an experimental design to assess the impact of alterations in one or more independent variables on a dependent variable. The effects were assessed and recorded accordingly. In this study, the researcher employed both traditional methodologies and digital learning technologies to assess the impact on the participants. The study sample consisted of an experimental group that enrolled in a digital learning technology programme and a control group that studied using the conventional method.

2.2. Participants

The study included students with learning disabilities who were enrolled in the Abha Governorate, Saudi Arabia, before its division into 170 schools. We employed a stochastic sampling methodology to choose our sample and selected two classes at random to participate in the study. A total of 32 students were assigned randomly to one of the two classrooms, while the other classroom was designated as the control group.

2.3. Research instrument

The utilization of two distinct instruments for research facilitated the attainment of the study's aims:

1. A digital learning technology programme tailored for an educational project that depends on digital learning technologies. Following a comprehensive assessment of the experiment's main goals and the relevant material about the issues being studied, the researcher developed an initial set of 28 behavioural sessions. The framework consists of multiple components, namely: use, comprehension, recall, evaluation, synthesis, and assessment. A team of professionals and experts validated the precision and comprehensiveness of the data. The particular objectives were altered by the received feedback, although the overall number of goals remained the same at 28. Each group employed distinct methodologies for lesson design; one used digital learning to support the experimental group, while the other relied on traditional approaches. The panel of specialists in educational strategy was presented with many cases for evaluation. The exercise was provided to evaluate their conformity with the predetermined behavioural objectives and the current topic matter. After incorporating the input from the experts, multiple paragraphs underwent further revisions, resulting in the production of the ultimate version.
2. Developing an assessment instrument to improve the life skills of students with learning disabilities: The study sought to ascertain the degree to which the objects employed in the experiment influenced the adaptive abilities of students facing learning disabilities. Life skills encompass a range of abilities, including social skills, self-reliance skills, and emotional skills. The test items were carefully designed to effectively communicate the intended objective and assess practical abilities in line with the criteria

set by contemporary academic research. Most of the exam components consisted of multiple-choice questions which encompassed a digital learning-oriented instructional project. The item selection strategy was based on a subscale particularly designed to enhance life skills. Every question in the set consisted of an initial statement and four possible answers. Students had to select an appropriate response. The examination consisted of a total of 21 components.

2.4. Instrument validity and reliability

The instrument's reliability was evaluated through two methods:

1. The evaluation of the instrument by a panel of eight arbitrators, who determined a threshold of 80% approval rate.
2. The degree of discriminant validity displayed by ten pupils was examined. The statistical significance of the discriminant validity of the coefficients was determined based on the observed (F) values of 5.10, 5.40, and 5.60.

Cronbach's alpha was employed to assess the internal consistency of the instrument. The instrument exhibited a commendable overall dependability score of 0.835. The dependability coefficients for each criterion vary from 0.821 to 0.852.

2.5. Data analysis

After data collection was complete, the average and standard deviation of the pre- and post-test scores were determined. Using the Eta square, we were able to calculate the effect size, which revealed the extent to which digital learning technology aids students with learning disabilities in developing their functional abilities. Statistical methods such as Wilcoxon's test and Z-value were used to give a more comprehensive explanation of the differences between two similar samples.

3. Results and discussion

Table 1 shows that the life skills of learning-disabled children in the control and experimental groups were similar before the implementation of a digital learning technology instructional programme. The results indicate that there was no statistically significant difference in the two groups' mean scores across many categories on the pre-test of life skills, it was the same for both sets of students.

Table 1: Initial Assessment

Dimensions	Groups	N	Mean score	Standard deviation	U	Z	P
Social skills	Experimental	16	16.30	260.80	31.00	12.50	0.180
	Control	16	16.50	264.00			
Independence skills	Experimental	16	15.80	252.80	28.00	10.80	0.160
	Control	16	15.70	251.20			
Emotional skills	Experimental	16	14.30	228.80	22.00	8.60	0.100
	Control	16	14.50	232.00			
Total	Experimental	16	15.50	248.00	26.00	10.20	0.150
	Control	16	15.60	249.60			

Table 2 presents the post-test results of the experimental group. The average scores for life skills, encompassing social skills, independence skills, and

emotional abilities, exhibited a notable disparity between the control and experimental groups. The findings indicate that the group of students in the experimental condition have a significant number of practical life skills.

The table also presents the results related to the questions of the study, showing the mean scores and standard deviations of the students in the post-testing after implementing the instructional programme.

Table 2: Post-test

Dimensions	Group	N	Mean score	Standard deviation	U	Z	P
Social skills	Experimental	16	20.20	323.20	260.00	0.600	0.000
	Control	16	15.30	244.80			
Independence skills	Experimental	16	20.00	320.00	250.00	0.660	0.000
	Control	16	16.20	259.20			
Emotional skills	Experimental	16	20.50	328.00	270.00	0.650	0.000
	Control	16	15.30	244.80			
Total	Experimental	16	20.20	323.20	260.00	0.600	0.000
	Control	16	15.60	249.60			

The researcher ascribes the outcome in Table 2 to how these technologies were introduced, exemplified by multimedia, iPads, projectors, interactive educational games, and activities that engage all of the students' senses. These methods effectively facilitated the students' independent acquisition of skills by exposing them to various scenarios that they experienced through the techniques provided. Consequently, the students learned about the skills in numerous stimulating ways, enabling them to learn comfortably, freely, and flexibly. The student bears the responsibility for how the activity is carried out, which has a direct impact on the student's level of engagement in the learning process. This assertion is supported by the research of Alshammari and Ahmed (2022), which highlights the efficacy of utilizing electronic technology in this regard. It offers students a more adaptable environment, allowing them to choose the time and location of learning, as well as study at their own pace and have control over the presentation rate, sequence, and progression. The researcher also credits this phenomenon to the inclusion of interactive elements in educational activities and games. These elements have heightened children's enthusiasm and motivation to learn, develop skills, and engage with their peers, which has fostered a lively, friendly, and collaborative atmosphere among the children.

The researcher also credits the effectiveness of the techniques used in the educational content for igniting students' motivation to learn. These techniques offer activities that are appropriate for students, moving away from mere narration and indoctrination. They also help overcome obstacles in the educational process by incorporating audio-visual stimuli that are rich in colours, sounds, and movement, and by reinforcing correct answers. This approach provides the learner with ample opportunities to repeat the activity, identify errors and rectify them, thereby enhancing their educational attainment. The method also aligns with the demands of the digital era and fulfils the current generation's inclination towards constant engagement with electronic devices, thereby infusing enthusiasm and enjoyment into the educational experience.

The outcome is also attributed to the congruence between the content of life skills, encompassing social skills, independence skills, emotional skills, and digital technologies. This congruence arises from the fact that these skills are suitable for students owing to their familiarity with the underlying concepts, alignment with their capabilities, and relevance to their environment. Moreover, the skills are delivered to students in discrete, interconnected segments that encompass a multitude of components. Engaging in diverse and stimulating activities that offer ongoing feedback enhances the retention of knowledge in students' minds, and motivates them to persist in their learning and attain active involvement. This result is in line with earlier studies by Al-Qahtani (2019), Hussein (2020), Alshammari and Ahmed (2022), and Abdel Aziz et al. (2020) .

In response to the second question: Is there a significant divergence in the efficacy of a programme utilizing digital learning technology to enhance the life skills of students with learning disabilities within the experimental group? Table 3 displays the outcomes.

The mean scores of the experimental groups in several life skills, such as social, independent, and emotional skills, exhibited substantial variation. Table 3 reveals significant variability in the final examination score. The results of evaluation indicate that pupils in the experimental group had a greater proficiency in life skills.

Table 3: Pre- and Post-test

Dimensions	Pre/Po	N	Mean score	Standard deviation	Z	P
Social skills	Negative	4	2.00	8	23.50	0.000
	Rank	12	6.00	72.00		
	Positive	0				
	Rank	16				
	Ties					
	Total					
Independence skills	Negative	4	2.00	8	22.80	0.000
	Rank	12	6.00	72.00		
	Positive	0				
	Rank	16				
	Ties					
	Total					
Emotional skills	Negative	4	2.00	8	22.50	0.000
	Rank	12	6.00	72.00		
	Positive	0				
	Rank	16				
	Ties					
	Total					
Total	Negative	4	2.00	8	23.00	0.000
	Rank	12	6.00	72.00		
	Positive	0				
	Rank	16				
	Ties					
	Total					

The researcher credits the outcome to employing a student-centred approach that incorporates diverse techniques and uses both material and moral reinforcement methods to effectively engage students in activities. Rather than relying on various learning methods that enhance skill acquisition, the researcher selects strategies that align with the specific skill they aim to cultivate in students. By employing strategies such as dialogue and discussion, think-share, brainstorming, and hot chair, individuals may develop skills in conversation etiquette, respect for others, and take advantage of the many learning possibilities offered by both group and individual learning. Independent learning fosters self-reliance and cultivates the ability to collaborate, engage in group learning, and pose thought-provoking inquiries. The objective is to engage in cognitive processes throughout the presentation of a skill, in order to enhance consciousness and focus on it, ensuring its continuous presence in the speaker's thoughts. Adapting various approaches and tasks to align with the idea and abilities effectively engages youngsters in the learning process, so enhancing their life skills and facilitating the accomplishment of the study objectives. The utilization of digital technology, such as multimedia, iPads, projectors, interactive educational games, and interactive educational activities, enhances the learning of diverse educational skills and concepts; including them in educational curricula and programmes enhances the advancement of the educational process and achieves the intended objectives. Furthermore, this approach caters to different educational levels and considers the unique characteristics of learners by creating educational programmes and activities that align with their diverse abilities. These technologies foster social and behavioural skills by facilitating interactions with peers and promoting group participation in a pleasurable setting, a result that is in line with earlier studies by Al-Qahtani (2019), Hussein (2020), Alshammari and Ahmed (2022), and Abdel Aziz et al. (2020).

The last question was framed to assess whether there was a statistically significant difference between the scores on the post-test and the follow-up tests when looking at how well a programme uses digital learning technology to improve the life skills of students with learning disabilities. Providing a prompt response to the current inquiry is crucial to deliver a significant answer. Table 4 indicates that there are no statistically significant differences in the mean scores of the experimental group between the post-test and follow-up assessments. The study's findings indicate that the programme's efficacy remained consistent over the post-intervention phase, rather than showing a decrease after it was discontinued.

Table 4: Post and Follow-up

Dimensions	Po/ Foll	N	Mean score	Standard deviation	Z	P
Social skills	Negative	14	6.20	86.80	10.30	0.130
	Rank	0	0.00	0.00		
	Positive	2				
	Rank	16				
	Ties					
	Total					
Independence skills	Negative	14	6.20	86.80	9.80	0.090
	Rank	0	0.00	0.00		
		2				

	Positive	16				
	Rank					
	Ties					
	Total					
Emotional skills	Negative	14	6.20	86.80	10.10	0.120
	Rank	0	0.00	0.00		
	Positive	2				
	Rank	16				
	Ties					
	Total					
Total	Negative	14	6.20	86.80	10.00	0.110
	Rank	0	0.00	0.00		
	Positive	2				
	Rank	16				
	Ties					
	Total					

The results align with the notion that digital learning technology has the potential to enhance the adaptive capacities of students with learning disabilities, fostering their social, self-reliant, and emotional competencies. There was no noticeable decrease in the previously published outcomes for the people at issue. Programmes that employ digital learning technologies also enable lifelong learning by enhancing the linkage between freshly taught ideas and previously comprehended ones. The hypothesis posits that students' likelihood of experiencing sudden or premature departure decreases when they have the opportunity to practise and enhance their cognitive and practical abilities across various curriculum-defined situations.

4. Conclusion

The results of this study corroborate the idea that utilizing digital learning technology can enhance the life skills of students with learning disabilities. Hence, a key factor lies in the extent to which digital learning technology has successfully advanced and improved students' ability to develop life skills and generate abstract mental representations using various methods, resulting in exceptional performance on assessments that assess all aspects of practical abilities. The experimental group exhibited superior performance compared to their peers in the control group, who received only auditory signals.

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