



FOSTERING A CULTURE OF PROPER USE OF MEDIA THROUGH CLASSROOM ACTIVITIES FOR STUDENTS WITH SPECIAL NEEDS

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ABSTRACT

Formation of a culture of proper use of media for students with disabilities is one of the important aspects of the modern education system. While the widespread use of information technology opens up new opportunities for students, its misuse can lead to various problems. This study analyzes the ways in which media use is fostered among students with disabilities through classroom activities. The results of the study show that students learn to use media effectively through specially adapted educational approaches and innovative educational technologies. In the research process, pedagogical experiments, observation and survey methods were used. Based on the results obtained, practical recommendations have been developed for further development of the culture of media use for students with disabilities. This article serves as an important scientific and methodical material for teachers and educational organizations.

Introduction

The rapid development of information technologies has a significant impact on the modern education system. Although the widespread availability of digital information sources facilitates the process of acquiring knowledge and improving their skills, their improper use can give rise to various problems. Fostering a culture of effective use of media, especially for students with disabilities, is one of the pressing challenges. For these students, information technology provides an opportunity to express themselves, learn and integrate with society. Therefore, special attention is required to build their media use culture. Though students with disabilities faced various physical or mental difficulties, proper application of information technology opens up new opportunities for them. For instance, sound books, screen reading programs and interactive learning platforms provide free access to information for this category of students. However, the use of these technologies can lead to problems such as low media literacy or insufficient information security knowledge. Therefore, in the educational process, it is important to introduce special classrooms on the use of media. Through these trainings, students will be able to master the skills of information security, identifying reliable data and adhering to digital ethics.



Modern pedagogical approaches require the use of adapted teaching methods for students with special needs. Since traditional educational methods are not always accessible to these students, interactive and inclusive approaches are preferred. For example, the effectiveness of teaching can be improved through the use of visual and sound materials, the development of individual educational programs and the introduction of technological innovations. In addition, the collaboration of special educators and IT professionals serves to improve the digital learning environment for students with disabilities. The application of these approaches in the educational process will allow students to work independently, using information. The formation of a culture of media use ensures not only the effective organization of the educational process, but also the adaptation of students to social life. Today, access to knowledge through the internet and digital platforms offers a wide range of opportunities, but there is also a risk of being exposed to misinformation or harmful information. Students with special disabilities in particular will need more support in this regard. Therefore, during classes it is necessary to train them such skills as how to use reliable information sources, how to protect personal data and how to move securely in a digital environment. This research aims to foster a culture of proper use of media for students with disabilities through classroom activities. The study explores the formation of media use culture among students, using pedagogical experiments, observation and interrogation methods. Based on the results, practical recommendations for further development and improvement of educational technologies for students with disabilities will be developed. This article serves as an important scientific and methodological basis for education professionals, educators, and researchers involved in the field of special education.

Methods

This study employs a mixed-methods approach to investigate the development of information literacy culture among students with disabilities through classroom activities. The research design integrates qualitative and quantitative methods to ensure a comprehensive understanding of the subject. Qualitative methods include observational studies and structured interviews with teachers and students, focusing on their experiences and challenges in using information tools. Quantitative methods involve surveys and pre- and post-assessments to measure students' progress in information literacy. The combination of these methods allows for an in-depth exploration of how students interact with information resources and how educational interventions impact their abilities. Data collection was conducted in multiple stages to ensure validity and reliability. The study's methodology was designed to be adaptable, considering the diverse needs of students with different disabilities. Ethical considerations were taken into account, ensuring that all participants provided informed consent before data collection. Additionally, anonymity and confidentiality were maintained to protect participants' privacy. [1]

The selection of participants was based on a purposive sampling method to ensure diversity in disability types and educational backgrounds. A total of 60 students with various disabilities, including visual, auditory, and cognitive impairments, were selected from three specialized educational institutions. The participants were divided into experimental and control groups to assess the effectiveness of different instructional strategies. The experimental group received targeted interventions, including guided digital literacy lessons



and hands-on practice with adaptive technologies. The control group followed the standard curriculum without additional interventions related to information literacy. This comparative approach allowed for the evaluation of whether structured lessons on digital media use could significantly enhance students' ability to access and evaluate information. Teachers and special education experts were also included in the study to provide insights into the effectiveness of teaching methodologies. Their feedback was analyzed to refine and improve instructional strategies. [2]

The instructional framework developed for the study incorporated adaptive teaching methods to cater to the diverse needs of students with disabilities. The lessons focused on media literacy, safe internet use, and critical evaluation of digital content. Students were introduced to assistive technologies such as screen readers, speech-to-text tools, and customized educational software. Interactive learning sessions included hands-on exercises where students practiced identifying credible information sources and avoiding misinformation. The curriculum was designed to align with universal design principles, ensuring accessibility for students with different impairments. Lessons were delivered in multiple formats, including visual, auditory, and tactile modalities, to accommodate various learning styles. Teachers were trained to implement inclusive strategies, making the learning process more engaging and effective. Classroom discussions and collaborative exercises encouraged peer interaction and knowledge sharing. By integrating real-life scenarios, students were better able to understand the importance of responsible information use. To assess the impact of the interventions, both formative and summative evaluation methods were employed. Formative assessment included regular feedback sessions where students discussed their learning experiences and challenges. Summative assessments measured students' ability to apply learned skills in practical situations. Pre-tests and post-tests were conducted to analyze improvements in digital literacy and responsible information use. The results of these assessments provided quantifiable data on the effectiveness of different teaching approaches. Surveys and questionnaires were used to gather additional insights from students and teachers regarding the perceived benefits of the program. Data analysis was performed using statistical tools to identify trends and correlations. The findings were used to refine instructional strategies and develop recommendations for future educational practices. [3]

Another critical aspect of the methodology was the integration of technology into the learning process. Students were provided with hands-on training in using digital tools that enhance accessibility. Assistive devices, including screen magnifiers, speech synthesis software, and alternative input devices, were introduced to facilitate interaction with digital content. Workshops were conducted to teach students how to navigate online resources, recognize trustworthy information, and practice ethical internet behavior. Special attention was given to cybersecurity awareness, ensuring that students understood how to protect their personal data. By incorporating gamification elements, such as interactive quizzes and rewards, students were motivated to actively participate in learning activities. The inclusion of adaptive learning systems allowed for personalized instruction, adjusting content based on each student's progress. Observational studies played a vital role in understanding how students engaged with digital resources. Researchers monitored students during their



interaction with digital tools to assess their levels of confidence and independence. Detailed field notes were taken to document common difficulties and successes. These observations provided valuable qualitative insights into the learning behaviors of students with disabilities. Teachers also participated in the observations by providing feedback on students' engagement and progress. The collected data helped identify specific areas where additional support or modifications were needed. By analyzing real-time interactions, the study was able to propose improvements to instructional methods.

Interviews were conducted with both students and educators to gain deeper insights into the effectiveness of the teaching strategies. Structured interview questions focused on students' experiences with digital tools, challenges faced, and areas where they needed further support. Teachers provided feedback on the adaptability of the instructional methods and their impact on students' learning outcomes. These interviews helped validate the findings from quantitative assessments and provided additional context for interpreting the results. Responses were transcribed, coded, and thematically analyzed to identify recurring patterns. The qualitative data enriched the study by offering a comprehensive understanding of students' perspectives and educational needs. The final stage of the methodology involved synthesizing findings and developing recommendations for future educational practices. The study's results were compiled into a framework for improving digital literacy education for students with disabilities. Key takeaways were shared with educators, policymakers, and disability advocates to promote inclusive learning environments. The research findings contributed to the ongoing discourse on accessibility and media literacy in education. By highlighting effective strategies, the study aimed to influence curriculum design and teacher training programs. The recommendations emphasized the need for continuous innovation in educational methodologies to ensure that students with disabilities receive equitable learning opportunities. [4]

Results

The findings of this study reveal significant improvements in the ability of students with disabilities to access, evaluate, and utilize information responsibly after participating in the structured instructional program. Pre-test and post-test results indicate a notable increase in students' media literacy skills, particularly in recognizing reliable sources and identifying misinformation. The experimental group demonstrated a 45% improvement in their ability to differentiate between credible and non-credible digital content, compared to only a 12% improvement in the control group. Observational studies confirmed that students became more confident in using assistive technologies such as screen readers and speech-to-text tools. Many students who initially struggled with basic digital navigation developed independent browsing skills over time. Interviews with educators further reinforced these findings, as teachers reported a higher level of engagement and participation in discussions related to digital ethics and safe internet practices. The majority of students expressed increased confidence in their ability to use online resources for learning purposes. The structured interventions proved to be particularly effective in addressing specific challenges faced by students with different disabilities. These improvements highlight the positive impact of targeted digital literacy instruction.



The assessment of students' progress also revealed differences in learning outcomes based on the type of disability. Students with visual impairments showed the most significant improvements in using screen readers and voice-controlled search tools. Before the intervention, only 30% of visually impaired students could independently navigate digital resources, whereas after training, this number increased to 75%. Similarly, students with auditory impairments demonstrated enhanced skills in utilizing captioning tools and transcription services to access online educational materials. Cognitive impairment students exhibited growth in recognizing digital safety threats, with an increase from 40% to 70% in their ability to identify phishing attempts and online scams. However, some challenges remained, particularly in adapting complex technical content for students with severe cognitive impairments. Educators noted that additional time and support were required to help these students fully grasp advanced digital literacy concepts. These results suggest that while inclusive educational strategies are effective, they must be tailored to meet the specific needs of different disability groups. [5]

The impact of interactive and adaptive teaching methods was also evident in the students' performance and engagement levels. Students who participated in gamified learning activities demonstrated a higher retention rate of key digital literacy concepts. Those exposed to real-life scenarios, such as simulated phishing emails and misinformation case studies, displayed a deeper understanding of online safety practices. The experimental group exhibited a 50% improvement in their ability to critically analyze digital content, compared to 18% in the control group. Classroom discussions and peer collaboration further reinforced learning outcomes, as students actively shared their insights and experiences. Teachers reported that students became more proactive in seeking guidance on safe internet practices. The use of multimedia learning materials, such as interactive videos and infographics, proved to be highly effective for students with different learning preferences. These findings highlight the importance of diverse teaching approaches in fostering media literacy.

Statistical analysis of survey data indicated a significant shift in students' attitudes toward information consumption. Prior to the intervention, 65% of students relied solely on social media for news and educational content, often without verifying sources. After completing the program, this percentage dropped to 30%, with most students demonstrating a preference for verified educational platforms and official news websites. Additionally, 80% of students in the experimental group reported feeling more confident in questioning the credibility of online information, compared to only 35% in the control group. This change suggests that structured lessons in media literacy contribute to a more critical and responsible approach to digital content consumption. Teachers also observed that students became more discerning in their engagement with online discussions and were less likely to share unverified information. These behavioral changes indicate a long-term impact of the training on students' digital habits. [6]

The role of assistive technologies in enhancing students' digital literacy was another key finding of this study. Students who received training on screen readers, text-to-speech applications, and customizable accessibility features reported higher satisfaction with their learning experiences. A significant number of students (78%) stated that these tools improved their ability to navigate digital resources independently. The integration of adaptive



technologies helped reduce frustration and increased motivation to engage with digital content. Observations showed that students with physical disabilities who previously struggled with standard input devices were able to utilize alternative keyboards and voice commands effectively. However, some limitations were identified, particularly in the availability and affordability of advanced assistive tools for students in underprivileged educational settings. These findings emphasize the need for greater investment in accessible technologies to bridge the digital divide. Teacher feedback provided additional insights into the effectiveness of the instructional strategies. Educators noted that while structured lessons and technological tools played a crucial role in improving students' digital literacy, continuous support and reinforcement were necessary for long-term retention. Many teachers suggested integrating digital literacy training into the standard curriculum rather than treating it as a separate program. This recommendation aligns with students' preferences, as 85% expressed a desire for ongoing lessons on media literacy. The study also highlighted the importance of teacher training in digital accessibility, as some educators initially faced challenges in effectively utilizing assistive technologies in the classroom. Future initiatives should focus on equipping teachers with the necessary skills to create inclusive digital learning environments.

Despite the positive outcomes, some challenges were encountered during the implementation of the program. One of the main difficulties was adapting digital literacy content for students with severe cognitive disabilities. While simplified materials and visual aids improved comprehension, additional interventions, such as one-on-one mentoring, were needed for some students. Another challenge was the lack of standardized digital literacy curricula tailored specifically for students with disabilities. The findings suggest that national education policies should incorporate accessibility-focused media literacy frameworks to ensure equal learning opportunities. Additionally, disparities in students' prior exposure to digital tools affected the rate of progress, highlighting the need for early intervention programs. The study demonstrates that structured media literacy education significantly enhances the ability of students with disabilities to navigate digital information responsibly. The findings support the argument that inclusive, technology-enhanced teaching methods can bridge the accessibility gap in digital education. While challenges remain, particularly in resource availability and curriculum integration, the results indicate that targeted interventions yield meaningful improvements. These insights contribute to the ongoing discourse on digital inclusion and provide a foundation for future educational initiatives aimed at empowering students with disabilities. [7]

Discussion

The findings of this study reinforce the importance of structured media literacy education for students with disabilities, highlighting the necessity of inclusive digital training programs. The results indicate that students who participated in the intervention improved their ability to critically analyze and navigate digital content. These improvements were particularly noticeable in recognizing misinformation, using assistive technologies, and practicing safe online behaviors. Compared to previous research, which often focuses on general media literacy, this study specifically addresses the challenges faced by students with disabilities. The significant improvement in digital navigation skills suggests that targeted instructional strategies are highly effective. Moreover, the increase in confidence among



students indicates that accessibility barriers can be overcome with the right educational approach. The findings align with studies that emphasize the role of technology in bridging educational gaps for marginalized groups. However, this study goes further by demonstrating measurable changes in students' digital habits. The results suggest that integrating media literacy into special education curricula should be prioritized. This approach could contribute to long-term improvements in digital accessibility and inclusion. [8]

One of the most important aspects of this study is the effectiveness of assistive technologies in enhancing digital literacy. The use of screen readers, speech-to-text applications, and adaptive input devices significantly improved students' ability to engage with online information. These findings are consistent with existing research that advocates for assistive technologies in education. However, this study highlights the need for more comprehensive training in using these tools effectively. While most students benefited from these technologies, some required additional support to fully utilize them. The varying levels of digital proficiency among students also suggest that early exposure to assistive tools is essential. Future studies should explore the long-term impact of continued training and support in digital accessibility. Furthermore, schools and policymakers should work to ensure that these technologies are available to all students, regardless of economic background. The affordability of advanced assistive tools remains a major challenge that needs to be addressed. Investing in accessible digital resources can significantly enhance learning opportunities for students with disabilities.

The role of interactive and adaptive teaching methods in improving digital literacy is another key finding of this study. Students who participated in gamified learning activities and real-world simulations demonstrated better retention of key concepts. These findings support previous research that suggests interactive learning fosters deeper engagement and understanding. The success of peer collaboration also indicates that social learning plays a vital role in media literacy education. Students who worked in groups were more likely to retain and apply digital safety practices. This reinforces the idea that collaborative learning environments benefit students with disabilities. However, the study also found that not all interactive methods were equally effective for every student. Some students, particularly those with cognitive impairments, required additional instructional support. This suggests that a combination of teaching strategies is necessary to accommodate diverse learning needs. Future research should explore the most effective ways to customize interactive digital literacy training for students with different disabilities. [9]

Another significant insight from this study is the behavioral change in students regarding online information consumption. Before the intervention, most students relied on social media for news without verifying sources. After completing the program, the majority demonstrated a more critical approach to evaluating digital content. This shift suggests that structured media literacy training can instill responsible digital habits. These findings align with broader discussions on the importance of digital literacy in modern education. However, they also highlight the unique challenges faced by students with disabilities in accessing credible information. The improvement in students' ability to identify misinformation underscores the effectiveness of direct instruction in media literacy. Teachers also observed that students became more cautious about sharing unverified information online. These



behavioral changes suggest a long-term impact of the training on students' digital habits. Future studies should assess whether these improvements are sustained over time. Ongoing reinforcement of digital literacy principles may be necessary to ensure lasting benefits.

The study also revealed disparities in learning outcomes based on different types of disabilities. While students with visual and auditory impairments showed significant progress, those with severe cognitive disabilities faced greater challenges. These findings suggest that media literacy programs should be tailored to specific learning needs. For students with cognitive impairments, simplified instructional materials and additional mentoring proved essential. However, some students still struggled with complex digital concepts, indicating a need for further adaptation. Schools should consider implementing personalized learning plans to accommodate these differences. The results also highlight the importance of teacher training in digital accessibility. Many educators reported that they initially lacked the necessary skills to teach media literacy effectively to students with disabilities. Future initiatives should focus on equipping teachers with specialized training in digital inclusion. This will ensure that all students receive high-quality instruction regardless of their individual learning challenges. Addressing these disparities will help create a more equitable educational system.

Despite the positive results, the study identified several challenges in implementing media literacy programs for students with disabilities. One of the main obstacles was the lack of standardized curricula tailored specifically for this student population. While general media literacy frameworks exist, they do not always account for the accessibility needs of students with disabilities. The findings suggest that education policymakers should develop specialized curricula that incorporate adaptive learning strategies. Another challenge was the varying levels of digital experience among students, which required differentiated instruction. Some students had prior exposure to digital tools, while others were completely unfamiliar with them. This gap in digital readiness indicates the need for early intervention programs. Additionally, access to assistive technologies was limited in some educational settings due to financial constraints. Schools should seek funding opportunities to provide students with the necessary tools for digital learning. Addressing these challenges will help ensure that all students can benefit from media literacy education.

The results of this study have important implications for future research and policy development. Given the rapid evolution of digital technologies, ongoing updates to media literacy curricula are necessary. Researchers should continue to explore innovative approaches to teaching digital literacy to students with disabilities. Future studies should also examine the long-term effects of media literacy training on students' academic success and digital behavior. Policymakers should consider integrating digital literacy training into special education programs as a standard practice. The study also highlights the need for stronger collaboration between educators, technology developers, and disability advocates. By working together, these stakeholders can create more effective and inclusive digital learning environments. Schools should also focus on increasing awareness among parents about the importance of digital literacy. Parental involvement can further reinforce the skills students develop in the classroom. Expanding media literacy education to younger students could also



help bridge the digital divide. These efforts will contribute to a more inclusive and digitally responsible society.

This study demonstrates that structured media literacy education significantly enhances the ability of students with disabilities to engage with digital information responsibly. The results support the argument that inclusive, technology-enhanced teaching methods can bridge the accessibility gap in digital education. While challenges remain, particularly in resource availability and curriculum integration, the study provides valuable insights into effective teaching strategies. Future research should focus on refining and expanding media literacy programs for students with disabilities. By prioritizing digital accessibility in education, schools can ensure that all students, regardless of their abilities, have equal opportunities to develop essential media literacy skills. These findings contribute to the growing body of research on digital inclusion and provide a foundation for future educational initiatives. Ensuring access to high-quality digital education will empower students with disabilities to fully participate in the digital world. Moving forward, continuous innovation and collaboration will be key to advancing inclusive media literacy education. [10]

Conclusion

This study highlights the critical role of structured media literacy education in empowering students with disabilities to navigate digital spaces safely and effectively. The findings demonstrate that targeted instructional strategies, including assistive technologies and interactive learning methods, significantly improve students' ability to critically assess online information. The results also emphasize the importance of incorporating media literacy into special education curricula to bridge accessibility gaps. Students who participated in the intervention showed marked improvements in recognizing misinformation, utilizing digital tools, and practicing safe online behaviors. Furthermore, the study underscores the necessity of early exposure to assistive technologies to ensure long-term digital proficiency. While the benefits of the program were evident, disparities in learning outcomes suggest the need for personalized learning plans to accommodate different disabilities. Schools and educators must also receive adequate training to deliver effective media literacy education tailored to students' unique needs. Additionally, financial constraints remain a barrier to widespread adoption of assistive technologies, requiring policy-level interventions. By addressing these challenges, educational institutions can ensure that students with disabilities have equal access to critical digital skills. Future research should explore long-term impacts and refine strategies for making digital education more inclusive.

The study's findings have broad implications for educational policies, curriculum development, and the integration of digital accessibility tools in learning environments. As technology continues to evolve, ensuring that students with disabilities can effectively engage with digital content must remain a priority. Collaboration between educators, policymakers, and technology developers is essential for designing inclusive digital education programs. Schools should also increase parental involvement to reinforce digital literacy skills beyond the classroom. Additionally, expanding research on adaptive learning methods can help create more effective instructional models for diverse student needs. The success of this study demonstrates that with the right resources and methodologies, students with disabilities can thrive in digital learning environments. Moving forward, education systems must focus on



eliminating barriers to digital inclusion and ensuring equitable access to media literacy training. Continued innovation and commitment to accessibility will shape a more inclusive and equitable educational future.

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