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IMPROVING THE LANGUAGE LITERACY ABILITIES OF CHILDREN WITH PARTICULAR LEARNING CHALLENGES: A REVIEW OF TECHNOLOGY UTILIZATION AND THE IMPLEMENTATION OF CREATIVE TEACHING APPROACHES

Annotation

The development of linguistic literacy has been one of the primary goals of the educational process. However, because of struggle with reading and then with written speech, individuals with Specific Learning Difficulties (SLD) typically cannot keep up with the rest of the class. The purpose of this study is to provide a concise overview of the research on instructional methods, software, and applications that can improve the fundamental abilities and skills that are closely related to students with SLD language literacy.

Key words: visual processing abnormalities, curriculum customization, Specific Learning Difficulties, language literacy, new technologies, training programs, cognitive goal

УЛУЧШЕНИЕ ЯЗЫКОВОЙ ГРАМОТНОСТИ ДЕТЕЙ С ОСОБЫМИ ТРУДНОСТЯМИ В ОБУЧЕНИИ: ОБЗОР ИСПОЛЬЗОВАНИЯ ТЕХНОЛОГИЙ И РЕАЛИЗАЦИИ ТВОРЧЕСКИХ ПОДХОДОВ К ОБУЧЕНИЮ

Аннотация

Развитие языковой грамотности стало одной из первоочередных задач образовательного процесса. Однако из-за проблем с чтением, а затем и с письменной речью, люди со Специфическими Трудностями в Обучении (СТО), как правило, не успевают за остальными учениками класса. Цель этого исследования — предоставить краткий обзор исследований методов обучения, программного обеспечения и приложений, которые могут улучшить фундаментальные способности и навыки, тесно связанные с учащимися с языковой грамотностью СТО.

Ключевые слова: нарушения визуальной обработки, адаптация учебной программы, особые трудности обучения, языковая грамотность, новые технологии, учебные программы, когнитивная цель.

TIL O‘RGANISHDA MUAYYAN QIYINCHILIKLARGA DUCH KELGAN BOLALARNING SAVODXONLIGINI OSHIRISH: TEXNOLOGIYADAN FOYDALANISH VA TA‘LIMGA IJODIY YONDASHUVLARNI TADBIQ QILISH

Аннотация

Til savodxonligini rivojlantirish ta‘lim jarayonining asosiy vazifalaridan biriga aylandi. Biroq, o‘qish va yozish bilan bog‘liq qiyinchiliklar tufayli, maxsus o‘rganish qiyinchiliklari (MO‘Q) bo‘lgan til o‘rganuvchilar sinfning qolgan qismidan ortda qolishadi. Ushbu tadqiqotning maqsadi MO‘Q tilini biladigan talabalar bilan chambarchas bog‘liq bo‘lgan fundamental qobiliyat va ko‘nikmalarni yaxshilashi mumkin bo‘lgan o‘qitish usullari, dasturiy ishlanma va ilovalar bo‘yicha olib borilgan tadqiqotlar to‘g‘risida qisqacha ma‘lumot berishdir.

Kalit so‘zlar: vizual ishlov berishning buzilishi, o‘quv dasturiga moslashish, o‘rganishning o‘ziga xos kamchiliklari, til savodxonligi, yangi texnologiyalar, o‘quv dasturi, kognitiv maqsad.

Introduction. Experts define "literacy" as the ability to read, write, and comprehend a variety of written discourses, as well as the capacity to produce a wide range of spoken expressions, comprehend and negotiate the meaning of messages within their social context, and generally exert control over one’s life and surroundings through written discourse (Hatzisavvidis, 2010). Therefore, the goal of language literacy is to communicate and develop language abilities while also understanding and producing written and spoken language (Matsagouras, 2007).

However, students who have specific learning disabilities typically fall below the class level when they struggle, first with reading and then with writing. Different educational approaches are needed depending on whether a student is struggling with visual or auditory processing abnormalities. Reading challenges can stem from a variety of deficits that pupils may exhibit. Writing problems typically accompany reading problems, and these problems might manifest as errors in writing, including letter reversals, letter confusion, letter additions or deletions, etc. Different levels of curriculum customization can be made to create an

educational environment that meets the needs of various youngsters. For instance, it is possible to adapt lesson plans, instructional techniques, and—most importantly—the introduction of new technology to better meet the unique needs of students with SLDs. Teachers can use technology to help students with SLD receive the much-needed personalization of learning activities, quick feedback, and methodical and ongoing practice (Pozzi, 2011).

Numerous studies have demonstrated the advantages of computer use in general education. To close a gap in the existing literature and encourage more research, the main objectives of this brief review are to examine the beneficial effects of technology on the language literacy skills of children with SLD.

The usage of technology for the improvement of the language literacy of children with learning difficulties.

Technology use can support the proper curriculum adaptation since it can be used to address many of the fundamental learning challenges that students face, such as attention and perception issues, by meeting their needs for

exercises that are personalized, immediate feedback, or methodical completion.

Educational programs, games, simulations, writing programs, problem-solving programs, and strategy teaching programs are examples of educational technology programs (Panteliadou & Argyropoulos, 2011). In addition, technology can help with the regular gathering and documentation of data from curriculum-based assessments and instruction. Furthermore, it can facilitate the implementation of innovative teaching strategies across a range of subject areas (Dawson, Heathcote & Poole, 2010).

According to research, using interactive e-storybooks of the highest caliber can help develop emergent literacy by providing scaffolding, which in turn can help with vocabulary growth, story comprehension, and engagement (Moody, 2010). E-novels or electronic books are described as an electronic version of a book that has features like "turning" pages and digital features that can help the reader, like text highlighting, word pronunciations, text-to-speech options, and hypermedia (e.g., video, animations, and sound) (Adam & Wild, 1997; Horney & Anderson Inman, 1999; Korat & Shamir, 2004).

More precisely, students with reading disabilities or those just starting to learn to read frequently use e-storybooks (Zucker, Moody, & McKenna, 2009). They can remove, detach, or store their content for later use (Vassiliou & Rowley, 2008). Simultaneously, certain modifications like altering the font or type size and screen brightness facilitate and expedite reading. The ebook's features, according to Tziviniou (2015), make it more practical to create more spherical courses, and it is one of the adaptations and differentiations suggested for students with special educational needs.

Learning methodical typing is especially beneficial for students who struggle with written speech because of motor issues. Mponti (2013) asserts that typing texts or sentences on a computer aid in the development of every component that goes into a written discourse, including phonological competence and reading comprehension, both of which are linked to writing and spelling. This is because a word is first examined by the computer for letter-to-letter correspondence, tone, word spacing, spelling, and grammatical and editorial accuracy before it is recorded. Additionally, it is beneficial to employ play-based learning or exercise-based training programs that encourage these kids to practice and get better at spelling.

Moreover, it is useful to use training programs through play or through exercises that can motivate these children to practice and improve their spelling. In fact, through typing, students see the word, listen to it, and then write it; on the one hand, they learn exemplary finger movements that help them remember the correct spelling, and on the other hand, they are being helped to connect the sound with the graph, improving the phonological competence of the students (Hasselbring & Candyce, 2000; Kumar, Paek & Lee, 2012).

Applications for language learning are available that include a virtual tutor for speech training and language acquisition. Given the widespread use of computers and embodied conversational agents, there are many obvious benefits to using a computer-animated agent as a language

tutor. For people with special needs, computer-based instruction is becoming a popular way to train and expand vocabulary (Massaro, 2004).

Additionally, computer programs that read the texts and guide the reader by highlighting each letter or word spoken on the screen can help to connect sounds and graphs. Problems involving reading decoding may benefit from this approach (Kumar, Paek & Lee, 2012). Simultaneously, certain programs enable users to click on an unfamiliar word to listen to its definition or synonym, thereby expanding and enhancing their vocabulary. The fact that these programs provide students with an incentive to read and teach the reading process in small steps is, nevertheless, their most crucial component (Kumar, Paek & Lee, 2012).

Using concept maps and visual aids in the classroom as useful tools for the enhancement of the student's literacy abilities.

In addition, by providing students with direct access to vocabulary or concept explanations along with other helpful information, the use of visual aids, graphemes, and concept maps improves their comprehension and strategic thinking (Castellani & Jeffs, 2001). Concept maps are made to help teachers and students identify the main concepts on which they should concentrate and steer clear of any distraction-causing stimuli (Zaid, 2011). By using the conceptual map as a metacognitive tool, students can enhance their written speech production skills and benefit greatly from this method, especially those who struggle with attention (Novak, 2010).

More precisely, the concept map is a useful tool for helping students organize their ideas in the prewriting phase and for taking notes during a lesson. The first writing stage of a text is called planning, and it improves the student's capacity for mental labor and helps her write at her best when the time comes. Additionally, for students with learning disabilities, using the Internet encourages the development of a social reference framework (Stanford & Siders, 2001). Online videos facilitate connectivity, effectiveness, engagement, and adaptability in education by enlisting educators and students in activities that foster the development of communication abilities and the dissemination of concepts and data intended to address a range of needs. Furthermore, it is considered to be one of the most effective educational tools that uses sound, image, and multimodal text to promote and alter pedagogical practices while facilitating access to learning (Cruse, 2007).

The use of Internet video in the classroom eliminates access time to learning resources and frees teaching and learning from the physical confines of the classroom. Along with achieving fundamental and qualitative changes like learning and teaching in a wide range of subjects, it also broadens children's experiences.

Conclusion. Using SLD skills can significantly improve the type and format of knowledge that is

given to individuals with learning disabilities. Furthermore, by using them, Special Education becomes more integrated into society, contemporary teaching methods, and pedagogical research. Numerous studies that highlight the primarily beneficial outcomes of using technology in general and special education to meet particular cognitive, social, and emotional goals are included in the current bibliography.

LITERATURE

1. Adam, N. & Wild, M. (1997) Applying CD-ROM interactive storybooks to learning to read. *Journal of Computer Assisted Learning*, Vol. 13, p. 119-132. Castellani, J. & Jeffs, T. (2001)
2. Cruse, E. (2007). Using educational video in the classroom: Theory, research, and practice. Wynnewood, PA: *Library Video Company*
3. Dawson, S., Heathcote, L., & Poole, G. (2010) "Harnessing ICT potential: The adoption and analysis of ICT systems for enhancing the student learning experience", *International Journal of Educational Management*, Vol. 24 Iss: 2, pp.116 – 128

4. Hasselbring, T., & Candyce H. Williams Glaser. (2000). Use of Computer Technology to Help Students with Special Needs.
5. *The Future of Children*, 10(2), 102-122. doi:10.2307/1602691
6. Hatzisavvidis, S. (2010). *Grammar of New Greek Language. Theoretical bases and description*. Thessaloniki: Vantias.
7. Horney, M. A., & Anderson-Inman, L. (1999). Supported texts in electronic reading environments. *Reading & Writing Quarterly*, 15, 127-168.
8. Korat, O. & Shamir, A. (2004). Do Hebrew electronic books differ from Dutch electronic books? A replication of a Dutch content analysis. *Journal of Computer Assisted Learning*, 20, 257- 268.
9. Kumar, A., Paek, T., & Lee, B. (2012). Voice typing: a new speech interaction model for dictation on touchscreen devices. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '12)*. ACM, New York, NY, USA, 2277-2286. DOI: <http://dx.doi.org/10.1145/2207676.2208386>
10. Massaro, D. W. (2004). Symbiotic Value of an Embodied Agent in Language Learning. In R.H. Sprague, Jr.(Ed.), *Proceedings of 37th Annual Hawaii International Conference on System Sciences,(HICCS'04)* (CD-ROM,10 pages). Los Alamitos, CA: IEEE Computer Society Press. Best paper in Emerging Technologies
11. Matsagouras, E. (2007). *School literacy*. Athens: Gregoris
12. Moody, A. (2010). Using Electronic Books in the Classroom to Enhance Emergent Literacy Skills in Young Children, *Journal of Literacy and Technology*, 22 (11), 4.
13. Mponti, E. (2013). *Special learning difficulties: an alternative approach for everyone*. Thessaloniki: Methexis.
14. Novak J. D. (2010). Learning, Creating and Using Knowledge: Concept maps as facilitative tools and Corporations, *Journal of e-learning and Knowledge Society*, Vol. 6, p. 3, September 2010, pp. 21-30.
15. Panteliadou, S. & Argyropoulos, B. (Eds). (2011). *Special Education: from research to teaching*. Athens: Pedio.
16. Pozzi, F. (2011). The impact of scripted roles on online collaborative learning processes. *Computer-Supported Collaborative Learning*, 6(3), p.471-474. Stanford, P., & Siders, J. A. (2001). Authentic assessment of intervention. *Intervention in School and Clinic*, 36(3), 163-167.
17. Tzivnikou, S. (2015). *Learning difficulties – teaching interventions*. Athens: Kallipos
18. Walker, E., Rummel, N. & Koedinger, R. (2011). Designing automated support to improve student-helping behaviors in a peer tutoring activity. *Computer-Supported Collaborative Learning*. doi:10.1007/s11412-011-9111- 2.
19. Zaid, M. A. (2011). Effects of web-based pre-writing activities on college EFL students' writing performance and their writing apprehension. *Journal of King Saud University- Languages and Transition*, 23 (2), pp. 77-85.
20. Zucker, T., Moody, A., & McKenna, M. (2009). The Effects of Electronic Books on PreKindergarten-to-Grade 5 Students' Literacy and Language Outcomes: A Research Synthesis. *Journal of Educational Computing Research*, 40, 47-87.