Special Education Technology Research: What Have We Learned Lately?

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Number	Citation	Evidence[1]	Notes
Topic: Artificial Intelligence			
1	Marino, M. T., Vasquez, E., Dieker, L., Basham, J., & Blackorby, J. (2023). The future of artificial intelligence in special education technology. *Journal of Special Education Technology, 38*(3), 404-416. https://doi.org/10.1177/01626434231165977	7 - Expert opinion	
2	Rice, M. F., & Dunn, S. (2023). The use of artificial intelligence with students with identified disabilities: A systematic review with critique. *Computers in the Schools*, (preprint) 1-21. https://doi.org/10.1080/07380569.2023.2244935	5 - Systemic review	
3	Smith, E. M., Graham, D., Morgan, C., & MacLachlan, M. (2023). Artificial intelligence and assistive technology: risks, rewards, challenges, and opportunities. *Assistive Technology, 35*(5), 375-377. https://doi.org/10.1080/10400435.2023.2259247	7 - Expert opinion	
Topic: Assistive Technology Consideration			
4	DeLuca, E. R., Da Fonte, M. A., & Boesch, M. C. (2022). Reliability among school-based professionals: Using a feature-matching screening checklist to identify communication systems. *Journal of Special Education Technology, 37*(4), 536-549. https://doi.org/10.1177/01626434211066	6 - Single research study	
5	Hochhauser, M., Wagner, M., & Shvalb, N. (2023). Assessment of children's writing features: A pilot method study of pen-grip kinetics and writing surface pressure. *Assistive Technology, 35*(1), 107-115. https://doi.org/10.1080/10400435.2021.1956640	6 - Single research study	
Topic: Assistive Technology Policy			
6	Ebuenyi, I. D., Smith, E. M., Jamali, M. Z., Munthali, A., & MacLachlan, M. (2023). The IDEAL PROCESS for developing assistive technology policy. *Assistive Technology*, (preprint). https://doi.org/10.1080/10400435.2023.2254359	7 - Expert opinion	
Topic: Classroom Practices			
7	Kearney, K. B., & Pistorio, K. H. (2023). Creating electronic-literacy based behavioral interventions. *Journal of Special Education Technology, 38*(1), 86-92. https://doi.org/10.1177/0162643421104385	7 - Expert opinion	
8	Kearney, M., Young, K., & Burke, P. F. (2023). An examination of special education teachers' digital practices. *Journal of Special Education Technology,* 38(3), 314-326. https://doi.org/10.1177/01626434221094798	6 - Single research study	
9	Scheibel, G., Zimmerman, K. N., & Wills, H. P. (2023). Increasing on-task behavior using technology-based self-monitoring: A meta-analysis of I-connect. *Journal of Special Education Technology, 38*(2), 146-160. https://doi.org/10.1177/01626434221085554	5 - Systemic review	

10	Thapliyal, M., & Ahuja, N. J. (2023). Underpinning implications of instructional strategies on assistive technology for learning disability: A meta-synthesis review. *Disability and Rehabilitation: Assistive Technology, 1*8(4), 423-431. https://doi.org/10.1080/17483107.2020.1864669	5 - Systemic review	
11	Tuttle, M., & Carter, E. W. (2023). Systematic review of studies addressing computer-assisted instruction for students with visual impairment. *Journal of Special Education Technology, 38*(3), 274-287. https://doi.org/10.1177/01626434221088026	5 - Systemic review	
Topic: Collaborative Design and Development			
12	Aflatoony, L., Lee, S. J., & Sanford, J. (2023). Collective making: Co-designing 3D printed assistive technologies with occupational therapists, designers, and end-users. *Assistive Technology, 35*(2), 153-162. https://doi.org/10.1080/10400435.2021.1983070	6 - Single research study	
13	Baker, J. N., Stanger, C., Katz-Flotte, S., & Garza, T. (2023). A pilot investigation of a job development app with transition teachers and job coaches. *Journal of Special Education Technology, 38*(2), 213-227. https://doi.org/10.1177/01626434221113852	6 - Single research study	
14	Gilfoyle, M., Krul, J., & Oremus, M. (2023). Developing practice standards for engaging people living with dementia in product design, testing, and commercialization – A case study. *Assistive Technology, 35*(2), 127-135. https://doi.org/10.1080/10400435.2021.1968069	6 - Single research study	
15	Layton, N., Harper, K., Martinez, K., Berrick, N., & Naseri, C. (2023). Co-creating an assistive technology peer-support community: Learnings from AT Chat. *Disability and Rehabilitation: Assistive Technology, 18*(5), 603-609. https://doi.org/10.1080/17483107.2021.1897694	6 - Single research study	
16	Oderud, T., Boysen, E. S., Strisland, F., Dahl, I. L., Kildal, E., Hassel, B., & Morland, C. (2023). Identifying pain and distress in non-verbal persons with intellectual disability: Professional caregivers' and parents' attitudes towards using wearable sensors. *Technology and Disability, 35*(3), 207-216. https://doi.org/10.3233/TAD-220390	6 - Single research study	
Topic: Diversity, Equity, and Inclusion			
17	Frick, B. J., Bean, A. F., & Sonntag, A. M. (2023). Multicultural considerations in augmentative and alternative communication. Assistive Technology, 35(5), 435-450. https://doi.org/10.1080/10400435.2022.2108931	6 - Single research study	
Topic: Indoor Navigation			
18	Fernando, N., McMeekin, D. A., & Murray, I. (2023). Route planning methods in indoor navigation tools for vision impaired persons: A systematic review. *Disability and Rehabilitation: Assistive Technology, 18*(6), 763-782. https://doi.org/10.1080/17483107.2021.1922522	5 - Systemic review	

Topic: mHealth and Wellness			
19	Bhattacharjya, S., Lenker, J., & Ghosh, R. (2023). Assessing the usefulness of an mHealth strategy to support implementation of multi-faceted adaptive feeding interventions by community-based rehabilitation workers. *Assistive Technology, 35*(3), 228-234. https://doi.org/10.1080/10400435.2022.2028936	6 - Single research study	
20	McMahon, D. D., McMahon, A. K., Anglin, M., Abrams, K., Wilds, K., & Aumel, A. (2023). Digital health, fitness, and wellness tools for students with disabilities. *Journal of Special Education Technology, 38*(3), 392-403. https://doi.org/10.1177/01626434221094795	7 - Expert opinion	
Topic: Powered Mobility			
21	Arps, K., Darr, N., & Katz, J. (2023). Effect of adapted motorized ride-on toy use on developmental skills, quality of life, and driving competency in nonambulatory children age 9–60 months. *Assistive technology, 35*(1), 83-93. https://doi.org/10.1080/10400435.2021.1956643	6 - Single research study	
22	Rosen, L., Plummer, T., Sabet, A., Lange, M. L., & Livingstone, R. (2023). RESNA position on the application of power mobility devices for pediatric users. *Assistive Technology, 35*(1), 14-22. https://doi.org/10.1080/10400435.2017.1415575	7 - Expert opinion	
Topic: Robots			
23	Lim, M. J., Song, W. K., Kweon, H., & Ro, E. R. (2023). Care robot research and development plan for disability and aged care in Korea: A mixed-methods user participation study. *Assistive Technology, 35*(4), 292-301. https://doi.org/10.1080/10400435.2022.2038307	6 - Single research study	
24	Udupa, S., Kamat, V. R., & Menassa, C. C. (2023). Shared autonomy in assistive mobile robots: A review. Disability and Rehabilitation: *Assistive Technology, 18*(6), 827-848. https://doi.org/10.1080/17483107.2021.1928778	5 - Systemic review	
Topic: Smart Environments			
25	Landuran, A., Sauzeon, H., Consel, C., & N'Kaoua, B. (2023). Evaluation of a smart home platform for adults with Down syndrome. *Assistive Technology, 35*(4), 347-357. https://doi.org/10.1080/10400435.2022.2075487	6 - Single research study	
26	Smith, E., Sumner, P., Hedge, C., & Powell, G. (2023b). Smart-speaker technology and intellectual disabilities: Agency and wellbeing. *Disability and Rehabilitation: Assistive Technology, 18*(4), 432-442. https://doi.org/10.1080/17483107.2020.1864670	3 - Well designed controlled trial	
Topic: Special Education Technology Research Methods			
27	Cabral, B., Amorim, I., Silva, D., Santana, I., Carvalho, F., & Cordeiro, V. (2023). Assistive technology for people with visual disability: Future prospects through a techno-logy foresight exercise. *Technology and Disability, 35*(3), 183-194. https://doi.org/10.1007/s12193-016-0235-6	6 - Single research study	
28	İnci, G., & Kose, H. (2023). The landscape of technology research in special education: A bibliometric analysis. *Journal of Special Education Technology*, (preprint). https://doi.org/10.1177/016264342311805	5 - Systemic review	

29	Jamali-Phiri, M., Kafumba, J. A., MacLachlan, M., Smith, E. M., Ebuenyi, I. D., Eide, A. H., & Munthali, A. (2023). Addressing data deficiencies in assistive technology by using statistical matching methodology: A case study from Malawi. *Disability and Rehabilitation: Assistive Technology, 18*(4), 415-422. https://doi.org/10.1080/17483107.2020.1861118	6 - Single research study	
30	Sinha, D. B., Sinha, S., GS, A., Islam, M. T., & Sahoo, D. (2023). Twenty-five years of research in the Journal of Special Education Technology: A bibliometric analysis. *Journal of Special Education Technology*, (preprint). https://doi.org/10.1177/01626434231187O9	5 - Systemic review	
31	Torrens, G. E., & Asghar, S. (2023). 20 years of the Loughborough user centered assistive technology design process: Has it made a difference? *Assistive Technology, 35*(5), 425-434. https://doi.org/10.1080/10400435.2022.2113477	6 - Single research study	
Topic: Text to Speech			
32	Silvestri, R., Holmes, A., & Rahemtulla, R. (2022). The interaction of cognitive profiles and text-to-speech software on reading comprehension of adolescents with reading challenges. *Journal of Special Education Technology, 37*(4), 498-509. https://doi.org/10.1177/01626434211033577	6 - Single research study	

NOTEWORTHY 2023 REPORTS

What Works to Improve Access to AT? (AT2030)
https://at2030.org/what-works-to-improve-access-to-at/

Global Report on Assistive Technology (WHO)
https://iris.who.int/bitstream/handle/10665/354357/9789240049451-eng.pdf?sequence=1

SETDA 2023 State EdTech Trends Report
https://www.edtechdigest.com/2023/09/18/setda-2023-state-edtech-trends-report/

An Ed-tech Tragedy? Educational Technologies and School Closures in the Time of COVID-19 (UNESCO)
https://unesdoc.unesco.org/ark:/48223/pf0000386701

[1] Note: Evidence Level Rankings
1 - Meta analysis with effect size
2 - Well designed RCT
3 - Well designed controlled trial
4 - Well designed experiment
5 - Systemic review
6 - Single research study
7 - Expert opinion