



< Back to results | 1 of 11 | Next >

Download Print Save to PDF Add to List Create bibliography

**Proceedings of the 2023 17th International Conference on Ubiquitous Information Management and Communication, IMCOM 2023** • 2023 • 17th International Conference on Ubiquitous Information Management and Communication, IMCOM 2023 • Seoul • 3 January 2023 through 5 January 2023 • Code 186610

**Document type**

Conference Paper

**Source type**

Conference Proceedings

**ISBN**

978-166545348-6

**DOI**

10.1109/IMCOM56909.2023.10035638

**Publisher**

Institute of Electrical and Electronics Engineers Inc.

**Original language**

English

**Volume Editors**

Lee S., Choo H., Ismail R.

View less ^

# Assistive Technology for Children with Learning Disabilities: A Systematic Literature Review

Abd Khalid, Ahmad Haiqal<sup>a</sup> ; Mohkhlis, Nur Nazihah<sup>a</sup> ; Zakaria, Noor Azura<sup>a</sup> ;

Rejab, Mazidah Mat<sup>b</sup> ; Karim, Ruwinah Abdul<sup>c</sup> ; Suharsiwi, Suharsiwi<sup>d</sup>

Save all to author list

<sup>a</sup> International Islamic University Malaysia, Department of Computer Science Kulliyah of Information and Communication Technology, Gombak, Malaysia

<sup>b</sup> Universiti Tun Hussien Onn Malaysia, Faculty of Computer Science and Information Technology, Johor, Malaysia

<sup>c</sup> Penawar Special Learning Centre, Kuala Lumpur, Malaysia

<sup>d</sup> Universitas Muhammadiyah Jakarta, Department of Elementary Education, Jakarta, Indonesia

Full text options Export

Abstract

Author keywords

Indexed keywords

SciVal Topics

Metrics

Cited by 0 documents

Inform me when this document is cited in Scopus:

Set citation alert >

## Related documents

Assistive Technology Intervention in Dyslexia Disorder

Patnoorkar, R. , Chaudhary, S. , Pandey, S. (2023) 2023 International Conference on Artificial Intelligence and Smart Communication, AISC 2023

Vocational students with severe learning difficulties learning on the Internet

Starcic, A.I. , Niskala, M. (2010) British Journal of Educational Technology

Multilingual symbolic support for low levels of literacy on the web

Draffan, E.A. , Ding, C. , Wald, M. (2020) WebSci 2020 - Companion of the 12th ACM Conference on Web Science

View all related documents based on references

Find more related documents in Scopus based on:

Authors > Keywords >

## Abstract

The enhancement of technology is well-developed and assistive technology is one of the foremost that has been used significantly. Individuals with disabilities use assistive technology to perform the desired activity that would otherwise be difficult or impossible. Mobility devices such as walkers and wheelchairs, as well as hardware, software, and peripherals that assist people with disabilities in accessing computers or other information technologies, are examples of assistive technology .

Learning disabilities are caused by genetic and neurobiological factors that affect brain functioning, influencing one or more cognitive processes related to learning . This paper discusses a comprehensive systematic literature review (SLR) of the assistive technology (AT) for children with learning disabilities with combination of Kitchenham and PRISMA approach. This paper discusses on the assistive technologies developed for children with learning disabilities according to its type, purposes, techniques used, and platform or delivery system used to host the developed assistive technologies for children with learning disabilities . © 2023 IEEE.

## Author keywords

assistive technology ; children ; learning disabilities ; SLR

---

Indexed keywords 

---

SciVal Topics  

---

Metrics 

---

## References (41)

[View in search results format >](#)

All

[Export](#)  [Print](#)  [E-mail](#)  [Save to PDF](#) [Create bibliography](#)

- 
- 1 Sze, S.  
The Effects of Assistive Technology on Students with Disabilities  
(2009) *Journal of Educational Technology Systems*, 37 (4), pp. 419-429. Cited 7 times.
- 
- 2 Jay, M., Marks, W.  
(2021) *Medical Definition of Learning disability*, 6 (3).  
[Online].  
<https://www.medicinenet.com/learning-disability/definition.htm>
- 
- 3 Kriti Dhingra, A.G.D.Y.  
Assistive Technology for Preliminary Diagnosis of Learning Disability (LD) among Children  
(2019) *9 International Conference on Machine Learning, Big Data, Cloud and Parallel Computing (Com-IT-Con), India*
- 
- 4 Starcic, A.I.  
Educational technology for the inclusive classroom  
(2010) *Turkish Online Journal of Educational Technology*, 9 (3), pp. 26-37. Cited 24 times.  
<http://www.tojet.net/articles/933.pdf>
-

- 5 Wood, S.G., Moxley, J.H., Tighe, E.L., Wagner, R.K.  
Does Use of Text-to-Speech and Related Read-Aloud Tools Improve Reading Comprehension for Students With Reading Disabilities? A Meta-Analysis  
  
(2018) *Journal of Learning Disabilities*, 51 (1), pp. 73-84. Cited 68 times.  
<http://ldx.sagepub.com/archive/>  
doi: 10.1177/0022219416688170  
  
View at Publisher
- 
- 6 Barbara Kitchenham, S.M.C.  
(2007) *Guidelines for performing Systematic Literature Reviews in Software Engineering*. Cited 5451 times.
- 
- 7 Dharshini Gunasegar, A.D.D.R.R.  
A Systematic Literature Review of Empirical Evidence on Students with Mathematics Learning Disabilities  
(2021) *Malaysian Journal of Social Sciences and Humanities*, 6 (10), pp. 505-523.
- 
- 8 Libraries, A.  
*What is a Boolean Operator?*. Cited 3 times.  
[Online].  
<https://library.alliant.edu/screens/boolean.pdf>
- 
- 9 Poobrasert, O., Gestubtim, W.  
Development of assistive technology for students with dyscalculia  
  
(2013) *2013 2nd International Conference on E-Learning and E-Technologies in Education, ICEEE 2013*, art. no. 6644348, pp. 60-63. Cited 11 times.  
doi: 10.1109/ICeLeTE.2013.6644348  
  
View at Publisher
- 
- 10 Poobrasert, O., Mupattarot, T., Sae-Aue, L.  
Use of assistive technology to accommodate students with writing disabilities  
  
(2017) *2017 IEEE 5th International Conference on Serious Games and Applications for Health, SeGAH 2017*, art. no. 7939290. Cited 2 times.  
ISBN: 978-150905482-4  
doi: 10.1109/SeGAH.2017.7939290  
  
View at Publisher
- 
- 11 Alja'am, J.M., Jaoua, A.M., Alhazbi, S., Hassan, M., Elsaddik, A.  
An assistive computerized system for children with moderate intellectual and learning disabilities  
  
(2011) *2011 IEEE Global Engineering Education Conference, EDUCON 2011*, art. no. 5773141, pp. 226-230. Cited 6 times.  
ISBN: 978-161284643-9  
doi: 10.1109/EDUCON.2011.5773141  
  
View at Publisher