



Thank you for your request to our REL Reference Desk regarding evidence-based instructional practices for students with more severe intellectual and developmental disabilities. The information below represents the best available evidence found in the time allotted. Researchers consider the type of methodology used and give priority to research reports that employ well described and thorough methods. The resources are also selected based on the date of the publication with a preference for research from the last ten years. Additional criteria for inclusion include the source and funder of the resource.

**Question:** *What are evidence-based instructional practices for students with severe intellectual and developmental disabilities?*

- 1. Critical Components of Successful Inclusion of Students with Severe Disabilities: Literature Review.** 2012; Alquraini, T. & Gut, D.; *International Journal of Special Education*, v27 n1 p42-59 2012. 18 pages; ERIC Document #EJ979712.

Source: ERIC

<http://eric.ed.gov/?id=EJ979712>

According to the abstract: “This paper examines the critical components of successful inclusion for students with severe disabilities. This review sets out to provide an overview of literature regarding effective practices for inclusion with a focus on critical components of successful inclusion that assist in preparing the stakeholders worldwide to work and engage effectively with students with disabilities in inclusive schools. The methodology used to conduct this review was to systematically search internet resources, abstracts and databases. The descriptors used include: students with severe disabilities/significant disabilities/ intellectual disabilities, inclusion, modification, adaptations, assistive technology, collaboration, instructional strategies, typically developing peers, and family support. This was followed by the application of two sets of criteria: (1) the article consists of subjects with inclusion/inclusive/general education setting/public schools and (2) the article examines critical components of successful inclusion of students with disabilities or equivalent concepts as the outcome. Seventy two studies met the two criteria and are presented in this review. The author provides an integrated overview of current knowledge regarding the critical components that enhance the quality of inclusive education programs for students with severe disabilities across the world. This review provides evidence that these components support students’ access and progress, either in curricular or non-curricular activities in general education settings. Finally, the author identifies the need for future empirical studies to further examine how each of these components supports students with severe disabilities in general education settings.”

- 2. Evidence-Based Practices for Students with Severe Disabilities.** 2014; Browder, D.M., Wood, L., Thompson, J., & Ribuffo, C.; *CEEDAR (Collaboration for Effective Educator Development, Accountability and Reform) Center, 2014. 86 pages; CEEDAR Document #IC-3.*

Source: General Internet Search Using Google

<http://ceedar.education.ufl.edu/>

According to the abstract: “Individuals with moderate and severe developmental disabilities have been offered some of the most rapidly evolving educational services since students with disabilities were first guaranteed a free appropriate public education in 1975 (under PL 94-142). Although schools were not required to provide services prior to the 1970s, schools now must be accountable for ensuring that all students, including those with severe disabilities, make adequate yearly progress. For students to make adequate progress, teachers need access to the most effective instructional procedures available. Fortunately, research on how to teach students with severe disabilities has also rapidly evolved in the past 40 years. Our purpose for this IC [Innovation Configuration] was to summarize current, high-quality research on teaching students with severe disabilities.”

- 3. Using an Early Science Curriculum to Teach Science Vocabulary and Concepts to Students with Severe Developmental Disabilities.** 2013; Smith, B.R., Spooner, F., Jimenez, B.A., & Browder, D.; *Education and Treatment of Children; v36 n1 p1-31; 31 pages.*

Source: General Internet Search Using Google

[https://libres.uncg.edu/ir/uncg/f/B\\_Jimenez\\_Using\\_2013.pdf](https://libres.uncg.edu/ir/uncg/f/B_Jimenez_Using_2013.pdf)

According to the abstract: “Teaching academic content to students with severe developmental disabilities is a topic that has recently been debated, even though science content is one of the academic areas that comprise a standards-based curriculum. Science content like other academic skills can be taught to this population using forms of systematic instruction, a validated evidence-based practice. In this study, three elementary aged students between 6 and 8 years old were taught units from an Early Science curriculum via inquiry-based lessons and effects were measured by a multiple probe design across behaviors (units). Visual analysis shows a functional relationship between the introduction of the intervention and a change in each participant’s responding. These successful outcomes are discussed in light of other comparable work, the practicality of classroom teachers implementing similar lessons, social validity, and extending the knowledge-base of teaching science content to students with severe developmental disabilities.”

4. **Teaching Elementary Students With Multiple Disabilities to Participate in Shared Stories.** 2008; Browder, D.M., Mims, P. J., Spooner, F., Ahlgrim-Dezell, L., & Lee, A.; *Research & Practice for Persons with Severe Disabilities*, v33 n1-2, p3-12 2008. 10 pages.

Source: General Internet Search Using Google

This article is available for free with registration from Academia.edu:

[http://www.academia.edu/5573859/Review\\_of\\_experimental\\_research\\_on\\_academic\\_learning\\_by\\_students\\_with\\_moderate\\_and\\_severe\\_intellectual\\_disability\\_in\\_general\\_education](http://www.academia.edu/5573859/Review_of_experimental_research_on_academic_learning_by_students_with_moderate_and_severe_intellectual_disability_in_general_education)

According to the abstract: "Literacy may be one of the most important instructional areas for enhancing quality of life for all students. One way to promote literacy skills is through engaging students in the shared reading of a story. In this study, methods for planning and implementing shared stories for three students with multiple disabilities was evaluated via a multiple probe design across participants. Because the students had few consistent responses and complex physical challenges, a team planned the literacy participation using principles of universal design for learning (UDL). Outcomes indicate that all three students improved literacy skills and added to the literature base that shared stories can promote early literacy. Future research and implications for practical team implementation of the augmentative and alternative communication use and UDL components of representation, expression, and engagement are discussed."

5. **Review of Experimental Research on Academic Learning by Students With Moderate and Severe Intellectual Disability in General Education.** 2013. Hudson, M.E., Browder, D.M., & Wood, L.A.; *Research and Practice for Persons with Severe Disabilities*; v38 n1 p17-29 2013; ERIC Document # EJ1008070.

Source: ERIC

This article is available for purchase through ERIC: <http://eric.ed.gov/?id=EJ1008070>

According to the abstract: "A review of the literature on academic learning in general education settings for students with moderate and severe intellectual disability was conducted. A total of 17 experimental studies was identified and evaluated using quality indicators for single-case design research. Studies that met or met with reservation the criteria established for quality research were used to determine the evidence base of the instructional strategies described in the literature. The review found embedded instruction trials using constant time delay to be an evidence-based practice for teaching academic content to students with moderate and severe intellectual disability in general education. In addition, strategies that were not yet evidence-based but showed promise in the literature for teaching academic content to students with moderate and severe intellectual disability in general education were described. Last, implications for practice and directions for future research were discussed."

## **Search Process:**

### **Key words and search strings used in the search:**

Special education, evidence based programs/practices, severe/intellectual/developmental disabilities, students with disabilities, instructional strategies

### **Search databases and websites:**

***Institute of Education Sciences Resources (IES):*** [Regional Educational Laboratory Program \(REL\)](#); [What Works Clearinghouse \(WWC\)](#); [Institute of Education Sciences \(IES\)](#); [National Center for Education Research \(NCER\)](#); [National Center for Special Education \(NCSE\)](#)

***Other Federally Funded Resources:*** [Center on Enhancing Early Learning Outcomes](#); [Center on Great Teachers and Leaders](#); [Center on Innovations in Learning](#); [The Center on Instruction](#); [Center for Data-Driven Reform in Education](#); [Center for Early Literacy Learning](#); [National Center for Research on Early Childhood Education](#); [National Charter School Resource Center](#); [National Dissemination Center for Children with Disabilities](#); [National Dropout Prevention Center for Students with Disabilities](#); [Mid-Atlantic Comprehensive Center](#); [Northeast Comprehensive Center](#); [New England Equity Assistance Center](#); [Region IX Equity Assistance Center](#);

***Search Engines and Databases:*** [EBSCO Databases](#); [ERIC](#); [Google](#), [Google Scholar](#); General Internet Search; [JSTOR](#)

***Additional Resources:*** [Education Development Center](#); [WestEd](#); [The Campbell Collaboration](#); [Center on Education Policy \(CEP\)](#); [Council of Chief State School Officers \(CCSSO\)](#); [National Association of State Boards of Education \(NASBE\)](#); [ALLIANCE National Parent Technical Assistance Center](#); [National Center for Learning Disabilities](#);

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