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Eliminating Barriers to STEM Education for Students with Neurodevelopment Disabilities

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Eliminating Barriers to STEM Education for Students with Neurodevelopmental Disabilities

The importance of promoting students' science, technology, engineering, and mathematics (STEM) literacy has been at the forefront of educational and political interest across North America. Yet, most educational programs related to STEM learning are designed for neurotypical students. Traditional methods of STEM education often present barriers to the general curriculum for diverse learners, including students with neurodevelopmental disorders (NDD) such as autism, specific learning disability, and attention deficit hyperactivity disorder. Students with NDD often require differentiated instruction to access STEM learning alongside their peers; however, research guiding equitable access to STEM education for this population is lacking. Most of the current literature focuses on teaching science vocabulary instead of science practice skills (e.g., asking questions, using physical replicas, making predictions, analyzing findings, interpreting results). The current study explores the effects of an intervention package used to teach science practices in the context of STEM education for students with NDD.