



Syntheses of Research on Dyscalculia and The Common Core State Standards

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Dyscalculia

Mathematical learning disability affecting 3-6% of the school aged population

Visual-spatial and/or language processing disability

Difficulty conceptualizing numbers, performing operations, memorization, understanding terminology, etc.

No neurological explanation,

The Common Core State Standards

State-led initiative that started implementation in 2012

Give student knowledge to succeed in college, career and life no matter where they live
Make students more internationally competitive

Conceptual understanding of mathematics and use of real-world application

Purpose of this study

Understand how the new Common Core State Standards are supporting students with dyscalculia

Methodology

Qualitative and Quantitative investigation; Finding themes in interviews of 4 students, their parents and teachers and analyzing the OAA and PARCC exams

Findings

- Multi-sensory techniques
- Technology usage
- Conceptual Understanding
- Building Factor (Bloom's Taxonomy)
- Real-World Application
- Make-up and scoring of testing shifts towards mathematical reasoning

Implications of findings

The intervention strategies for students with dyscalculia coincide with the instructional implications under the Common Core State Standards

This positive correlation can infer more student achievement with the implementation of the new standards