### Syntheses of Research on Dyscalculia and The Common Core State Standards

**Melissa Siegel**  
Advised by Dr. Mary-Kate Sableski

#### 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