

---

National Center on Assessment and  
Accountability for Special Education  
(NCAASE):  
Update to ASES SCASS

---

Ann Schulte  
ann.schulte@asu.edu  
Arizona State University, NCAASE CoPI  
May 2015



Note: This version of the NCAASE presentation is annotated. For each study presented, the notes section below the slide provides a reference to a document that describes the study in more detail.

## Presentation Overview

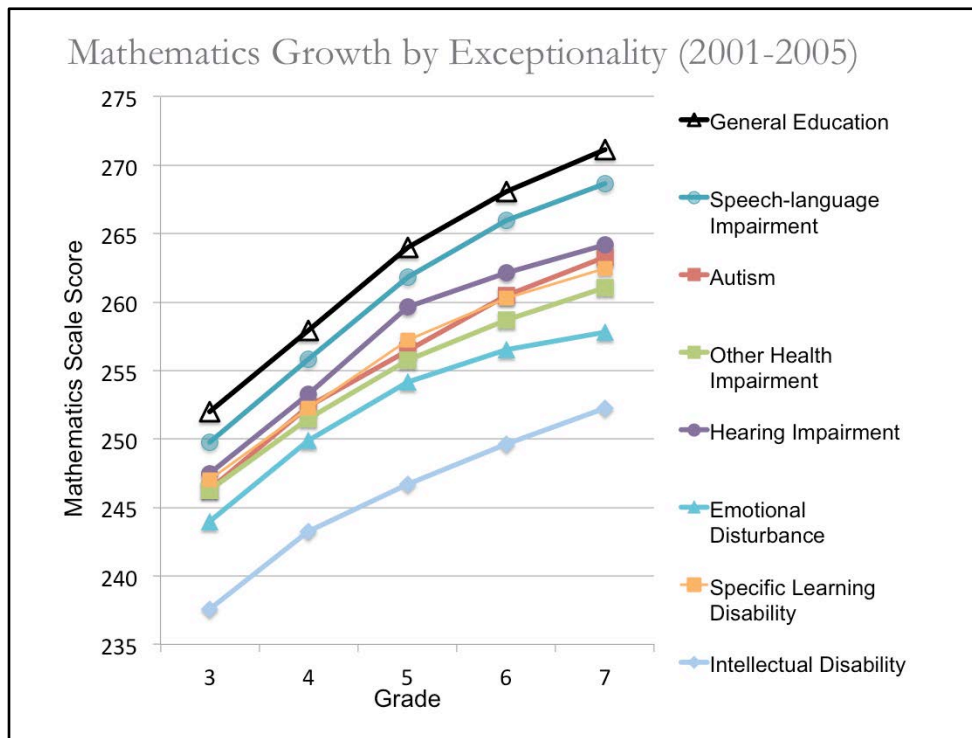
- Brief review of NCAASE
- A sampler of key NCAASE findings to date
- Research underway...Multistate study
- Invitation to dialogue
  - Looking ahead, what are the key assessment and accountability issues where research is most needed?

## NCAASE ([www.NCAASE.com](http://www.NCAASE.com))

- IES (NCSE) Center funded for five years in 2011 to provide research base to address fundamental questions about achievement growth in students with disabilities (SWDs)
- Multiple Partnerships
  - States: OR • NC • AZ • PA
  - Universities and researchers:
    - University of Oregon-Joseph Stevens and Gerald Tindal (CoPIs; Tindal, PD)
    - Arizona State University-Stephen Elliott and Ann Schulte (CoPIs)
- Organizations: CCSO, NASDE

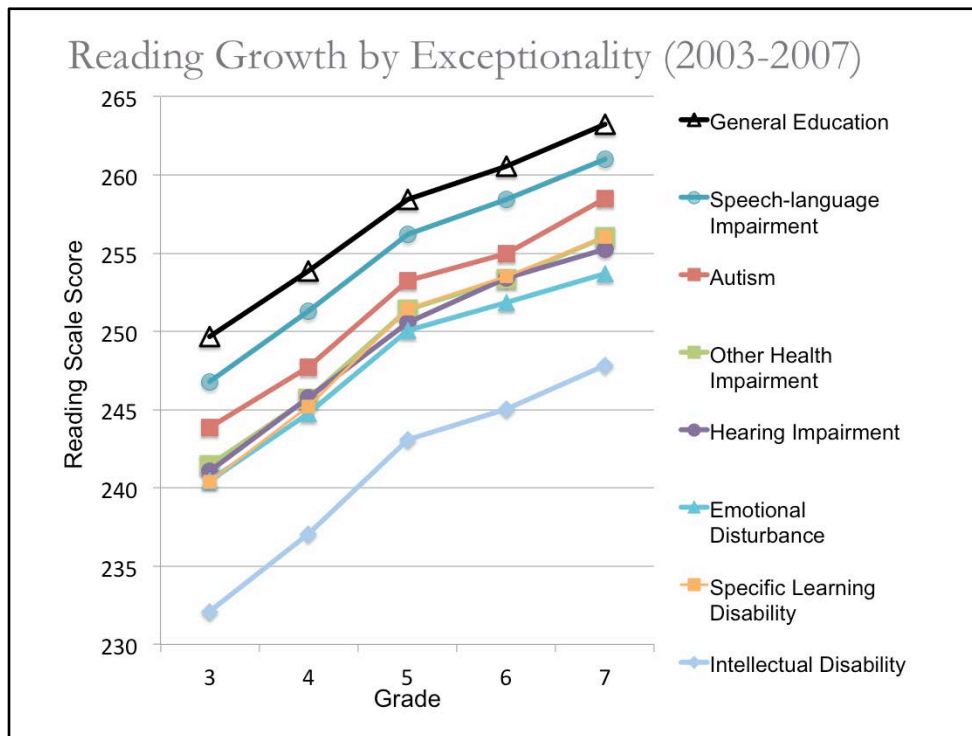
## Illustrative Findings from Three Areas

- Achievement growth-general and alternate assessments
- Accountability dilemmas and options for SWD
- Instructional practices and their relations to SWDs outcomes



### Related References

- Stevens, J. J., Schulte, A. C., Elliott, S. N., Nese, J. F. T., & Tindal, G. (2014). Mathematics achievement growth of students with and without disabilities on a statewide achievement test. *Journal of School Psychology, 53*, 45-62. doi: 10.1177/0014402914563695
- Schulte, A. C., & Stevens, J. J. (2014, September). *Academic growth of exceptional children in reading and mathematics: Findings from the National Center on Assessment and Accountability for Special Education* (Technical report based on presentation to the Australian Association for Special Education, Manley Beach, AU). Retrieved from the National Center on Assessment and Accountability (NCAASE) website: <http://www.ncaase.com/docs/StevensSchulteAASEfinalrev.pdf>



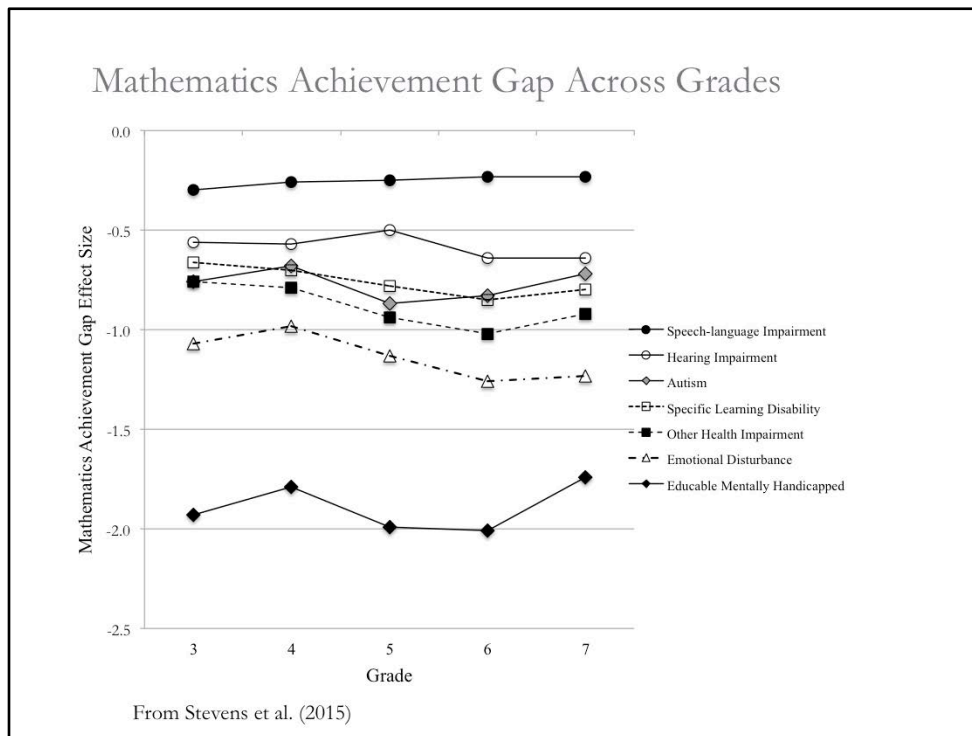
### Related References

Schulte, A. C., & Stevens, J. J. (2014, September). *Academic growth of exceptional children in reading and mathematics: Findings from the National Center on Assessment and Accountability for Special Education* (Technical report based on presentation to the Australian Association for Special Education, Manley Beach, AU). Retrieved from the National Center on Assessment and Accountability (NCAASE) website: <http://www.ncaase.com/docs/StevensSchulteAASEfinalrev.pdf>

## Take Home Messages

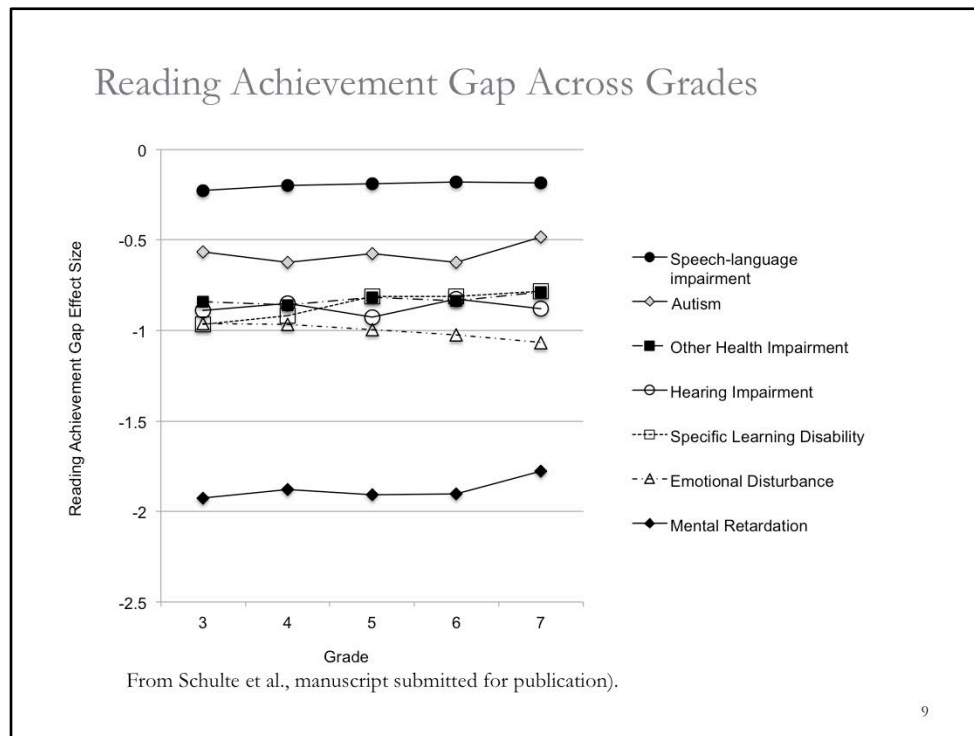
- Achievement growth for SWDs is curvilinear. Growth is more rapid in the early grades and slows as grade level increases.
- This growth pattern is similar to the one observed for students in general education.
- Grouping all SWDs into one subgroup masks considerable heterogeneity in the third grade starting points and smaller differences in growth among exceptionalities across grades.
- Overall, SWDs grew a bit more rapidly in reading and a bit more slowly in mathematics than students in general education, but given two different samples were used, this finding may not be replicated.

7



### Related References

Stevens, J. J., Schulte, A. C., Elliott, S. N., Nese, J. F. T., & Tindal, G. (2014). Mathematics achievement growth of students with and without disabilities on a statewide achievement test. *Journal of School Psychology, 53*, 45-62. doi: 10.1177/0014402914563695



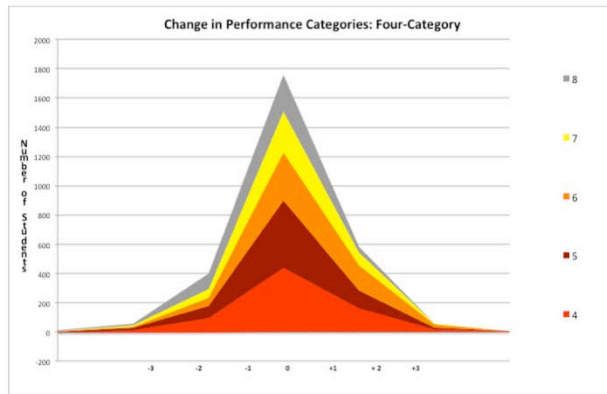
### Related References

Schulte, A. C., & Stevens, J. J. (2014, September). *Academic growth of exceptional children in reading and mathematics: Findings from the National Center on Assessment and Accountability for Special Education* (Technical report based on presentation to the Australian Association for Special Education, Manley Beach, AU). Retrieved from the National Center on Assessment and Accountability (NCAASE) website: <http://www.ncaase.com/docs/StevensSchulteAASEfinalrev.pdf>

## Take Home Messages

- Even with longitudinal samples, most achievement gaps for SWDs start out large and do not close appreciably over grades.
- Achievement gaps vary by exceptionality within the SWD subgroup.
- Relative ranking of achievement gaps for SWDs across the two subjects and samples show some consistency. Students with Intellectual Disabilities had the largest achievement gaps, followed by students w/ Emot. Dist. Students with Speech/Lang Imp's consistently had the smallest gaps.

## Findings from Alternate Assessment (for Students with Significant Cognitive Disabilities)



*Clustering of student growth near '0', demonstrating no growth from one year to the next in reading for most students.*

### Related References

Farley, D., Saven, J. L., & Tindal, G. (2013). *Growth models for students with significant cognitive disabilities*. Retrieved from the National Center on Assessment and Accountability (NCAASE) website:  
<http://ncaase.com/publications/in-briefs>

## Findings from Alternate Assessment (for Students with Significant Cognitive Disabilities)

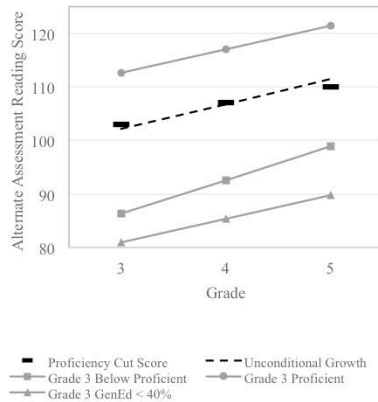


Figure 1. The estimated growth trajectories of the unconditional growth model (i.e., grand mean), three student subgroups of interest based on results, and the proficiency cut scores at each of Grades 3-5. The *Grade 3 Below Proficient* group represents the reference group (scored below proficiency at Grade 3, White, males, non-economically disadvantaged, non-disability, received general education instruction more than 40% of time). The *Grade 3 Proficient* group represents students that scored above proficiency at Grade 3 (all other predictors equal to the reference). The *Grade 3 GenEd < 40%* group represents students that received general education instruction less than 40% of the time (all other predictors equal to the reference).

### Related References

Tindal, G., Nese, J. F. T., Farley, D., Saven, J. L., and Elliot, S. (in press). Documenting reading growth for students with significant cognitive disabilities. *Exceptional Children*.

## Take Home Messages

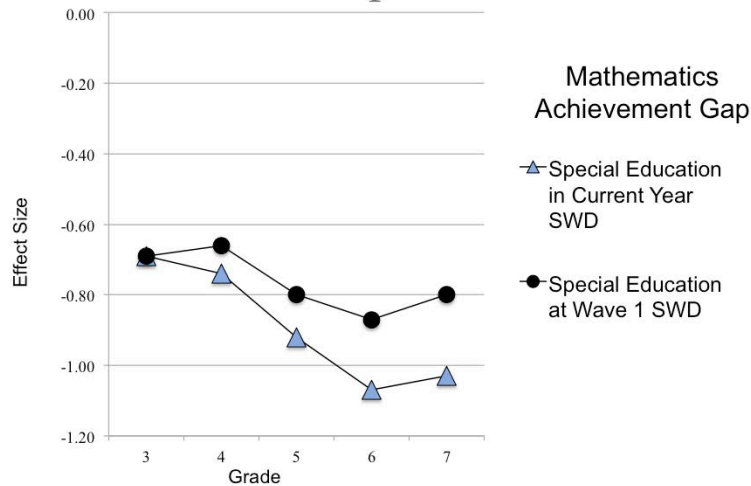
- Assessing growth on alternate assessments through transition matrices that show changes across categories has the advantage of cataloging “ecologically important” change, but is less sensitive to the typical growth students with significant cognitive disabilities may be showing across grades.
- With this sample and state’s alternate assessment, differences among categories of exceptionality for students participating did not predict initial level of achievement or growth.



**NCAASE** National Center on Assessment and  
Accountability for Special Education  
*Advancing research on growth measures, models, and policies for improved practice*

13

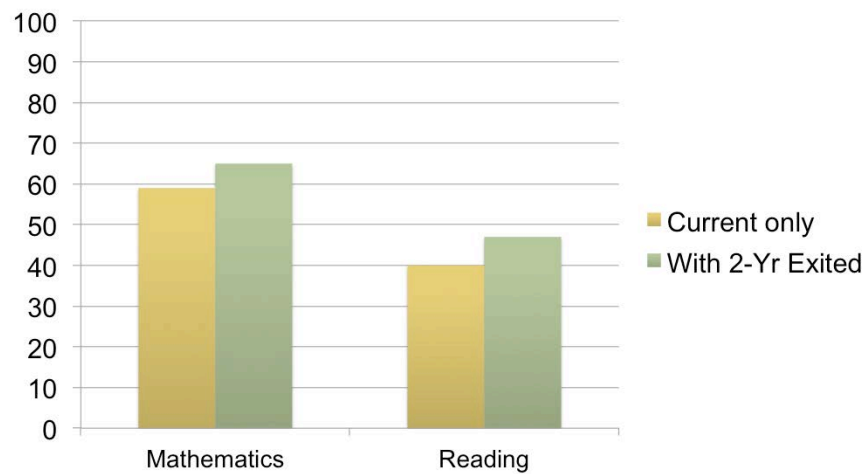
## Exits and Entrances from Special Education Affect Reported Outcomes



### Related References

Schulte, A. C., & Stevens, J. J. (2015). Once, sometimes, or always in special education: Mathematics growth and achievement gaps. *Exceptional Children*, 81, 370-387. doi: 10.1177/0014402914563695

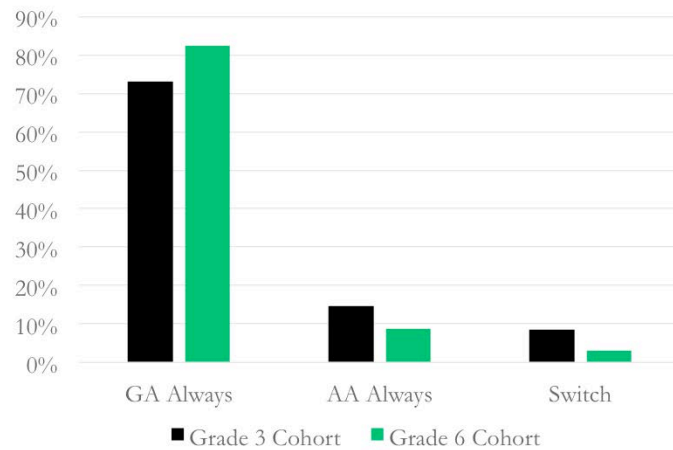
### Change in School-level Percent Proficient for SWD w/ Exiters Included (2010 data)



### Related References

Murr, N. S. (2013). *Examining options for school-level disaggregation of achievement outcomes for students with disabilities under No Child Left Behind*. Retrieved from <http://catalog.lib.ncsu.edu/record/NCSU3088535>

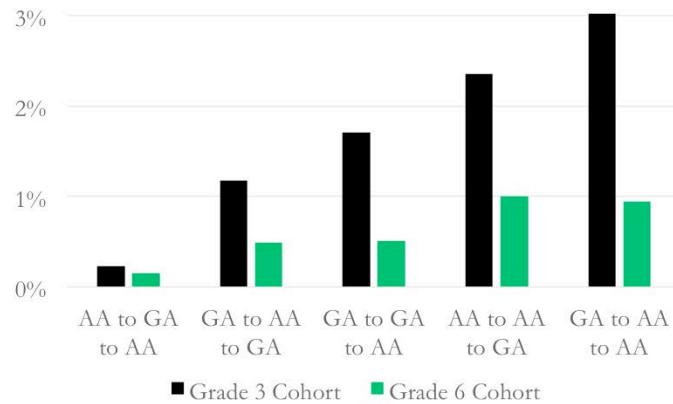
## Grade 3 ( $n = 3,048$ ) & Grade 6 ( $n = 3,911$ ) Cohort Test Patterns 2009/10 – 2011/12



### Related References

Saven, J. L., Anderson, D., Nese, J. F. T., Farley, D., & Tindal, G. (2015). Patterns of statewide test participation for students with significant cognitive disabilities. *Journal of Special Education*. Advance online publication doi: 10.1177/0022466915582213

## Grade 3 ( $n = 3,048$ ) and Grade 6 ( $n = 3,911$ ) Cohort Test Patterns 2009/10 – 2011/12



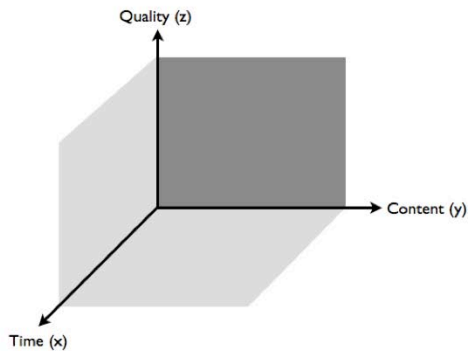
### Related References

Saven, J. L., Anderson, D., Nese, J. F. T., Farley, D., & Tindal, G. (2015). Patterns of statewide test participation for students with significant cognitive disabilities. *Journal of Special Education*. Advance online publication doi: 10.1177/0022466915582213

## Take Home Messages

- SWD is not a static designation, nor is participation in the alternate assessment consistent across grades.
- Both of these facts complicate interpretation of accountability results for SWD.
- Policy or assessment alternatives that recognize this complexity are important in drawing accurate conclusions about this group of students and the schools that serve them.

## Opportunity to Learn (OTL) the Intended Curriculum



### Definition: Opportunity to Learn

*The degree to which a teacher dedicates instructional time and content coverage to the intended curriculum objectives emphasizing higher-order cognitive processes, evidence-based instructional practices, and alternative grouping formats.*

(Kurz, 2011)

**A unified conceptualization of OTL  
based on 50+ years of empirical research.**



**NCAASE**

National Center on Assessment and  
Accountability for Special Education

Advancing research on growth measures, models, and policies for improved practice

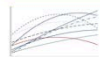
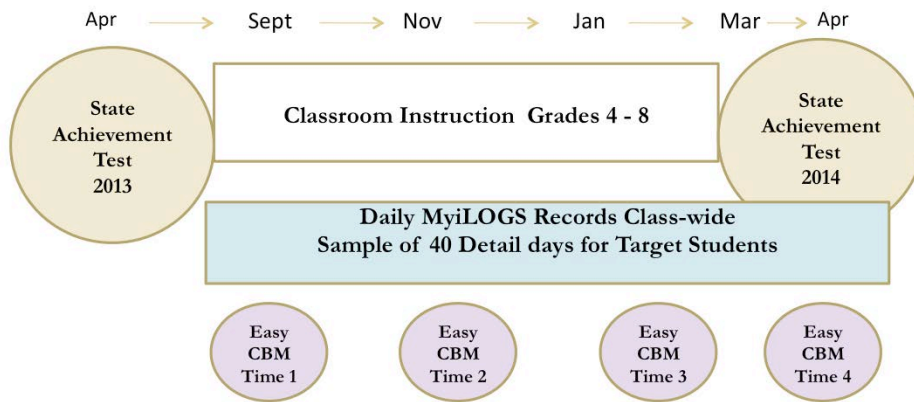
19

### Related References

Elliott, S. N., Kurz, A., Tindal, G., Stevens, J., & Yel, N. (2014). *Mathematics achievement gaps for elementary and secondary students: The influence of opportunity to learn and special education status*. Retrieved from the National Center on Assessment and Accountability for Special Education (NCAASE) website: <http://ncaase.com/publications/in-briefs>

## Multiple Measures Study Design

Teachers (N = 67; AZ 35, OR 32) and students (N = 261; 136 SWD + 125 SWoD) from AZ & OR schools grades 4<sup>th</sup>-8<sup>th</sup>



**NCAASE**

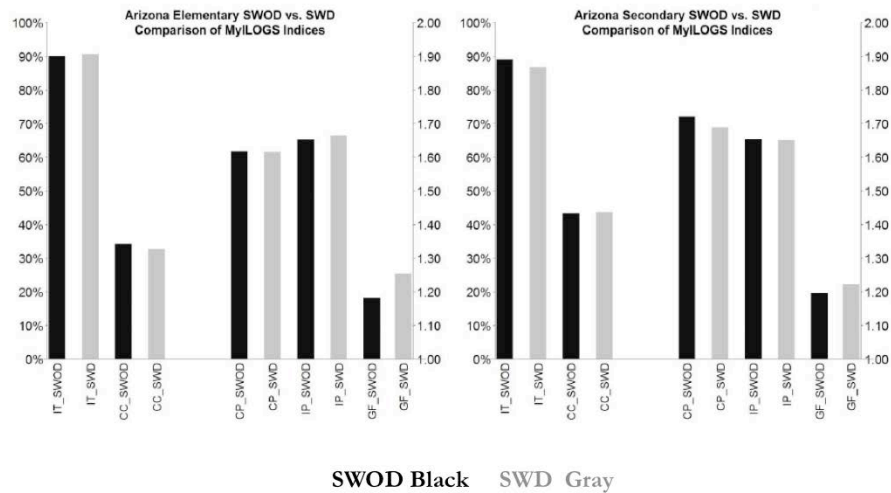
National Center on Assessment and Accountability for Special Education  
Advancing research on growth measures, models, and policies for improved practice

20

### Related References

Elliott, S. N., Kurz, A., Tindal, G., Stevens, J., & Yel, N. (2014). *Mathematics achievement gaps for elementary and secondary students: The influence of opportunity to learn and special education status*. Retrieved from the National Center on Assessment and Accountability for Special Education (NCAASE) website: <http://ncaase.com/publications/in-briefs>

## Comparison of OTL Indices for AZ Students



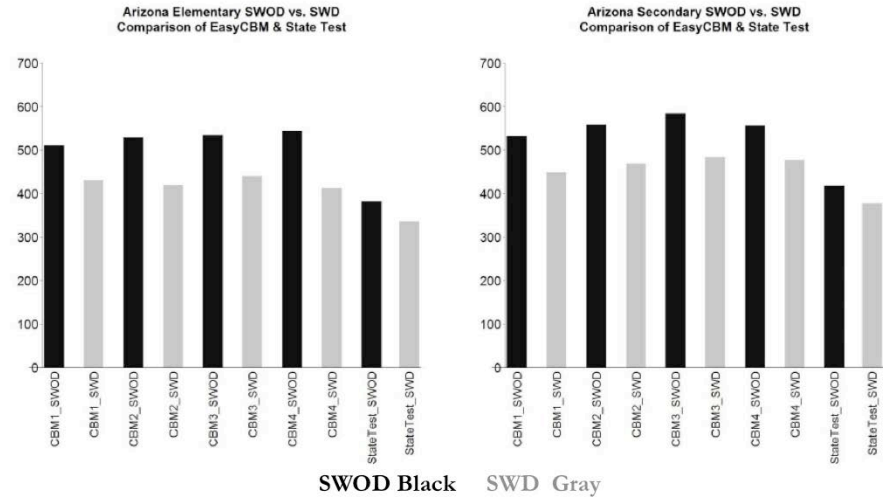
**NCAASE** National Center on Assessment and Accountability for Special Education  
Advancing research on growth measures, models, and policies for improved practice

21

### Related References

Elliott, S. N., Kurz, A., Tindal, G., Stevens, J., & Yel, N. (2014). *Mathematics achievement gaps for elementary and secondary students: The influence of opportunity to learn and special education status*. Retrieved from the National Center on Assessment and Accountability for Special Education (NCAASE) website: <http://ncaase.com/publications/in-briefs>

## Comparison of Interim & End-of-Year Test Results for AZ Students



### Related References

Elliott, S. N., Kurz, A., Tindal, G., Stevens, J., & Yel, N. (2014). *Mathematics achievement gaps for elementary and secondary students: The influence of opportunity to learn and special education status*. Retrieved from the National Center on Assessment and Accountability for Special Education (NCAASE) website: <http://ncaase.com/publications/in-briefs>

## Take Home Messages

- Offering students with disabilities the same amount of instruction on the same content standards in the same general education classrooms was found to offer **the same historic results—large and persistent gaps in achievement -- in comparison to students without disabilities.**
- Students with disabilities will need more instructional time on the intended curriculum, and perhaps more differentiated instruction to increase their rate of achievement enough to close gaps that currently exist between them and students without disabilities.

## Upcoming Work

- One of our central goals is to compare different models of estimating school performance
- We will compare commonly used models of school performance to determine how model choice and model characteristics impact characterizations of school performance using data from four states. Many different models will be compared, including transition matrices, student growth percentiles, value-added, and hierarchical linear growth models
- 2010-2012 data

## In closing...

- Questions/comments?
- Question to you—What are the key assessment and accountability issues for SWDs where research is most needed?—Invite you to approach me during conference or email me with any thoughts
- [ann.schulte@asu.edu](mailto:ann.schulte@asu.edu)
- References to studies discussed here are provided in handout available at [www.ncaase.com](http://www.ncaase.com)