

# Using Data-Based Individualization (DBI) to Provide Intensive Intervention in Academics and Behavior

Recommended Practices - Gallery Presentation II





## **SSIP Interactive Institutes**

**Albuquerque, NM; April 29-30, 2015**  
**Sarah Arden, NCSI**

**Jacksonville, FL; May 12-13, 2015**  
**Sarah Arden, NCSI**

**Chicago, IL; May 27-28, 2015**  
**Lauren Artzi , NCSI**

# Why Do We Need Intensive Intervention?



- Low academic achievement



- Drop-out rates



- Arrest rates

# NCL's Approach to Intensive Intervention: Data-Based Individualization (DBI)

**Data-Based Individualization** is a systematic method for using data to determine *when and how* to provide more intensive intervention:

- Origins in data-based program modification/experimental teaching were first developed at the University of Minnesota (Deno & Mirkin, 1977) and expanded upon by others (Capizzi & Fuchs, 2005; Fuchs, Deno, & Mirkin, 1984; Fuchs, Fuchs, & Hamlett, 1989).
- DBI is a process, not a single intervention program or strategy.
- Not a one-time fix—ongoing process comprising intervention and assessment adjusted over time.

# Why Do We Need Intensive Intervention?

## More Help



Validated programs are not universally effective programs; 3 to 5 percent of students need more help (Fuchs et al., 2008; NCII, 2013).

## More Practice



Students with intensive needs often require 10–30 times more practice than peers to learn new information (Gersten et al., 2008).

# What DBI Is...

## *Is*

- *Individualized based on student needs*
- *More intense, often with substantively different content AND pedagogy*
- *Composed of more frequent and precise progress monitoring*

## *Is Not*

- *A single approach*
- *A manual*
- *A pre-set program*
- *More of the same Tier 1 instruction*
- *More of the same supplemental instruction*

# Is DBI the Same as RTI? Special Education?

Many components of DBI are consistent with elements of special education and tiered service delivery systems.

## **Tiered Interventions (RTI, MTSS, PBIS)**

- Universal, secondary, and tertiary interventions
- Progress monitoring
- Team-based decisions based on data

## **Special Education**

- Individualized program
- Progress monitoring
- Team-based decisions based on data



# Resources and Tools:

Quick Overview



# Find Out What NCII Has to Offer

## National Center on **INTENSIVE INTERVENTION**

at American Institutes for Research

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### Interactive DBI Process

**Intensive intervention** helps students with severe and persistent learning or behavioral needs. The Center's approach to intensive intervention is **data-based individualization (DBI)**.

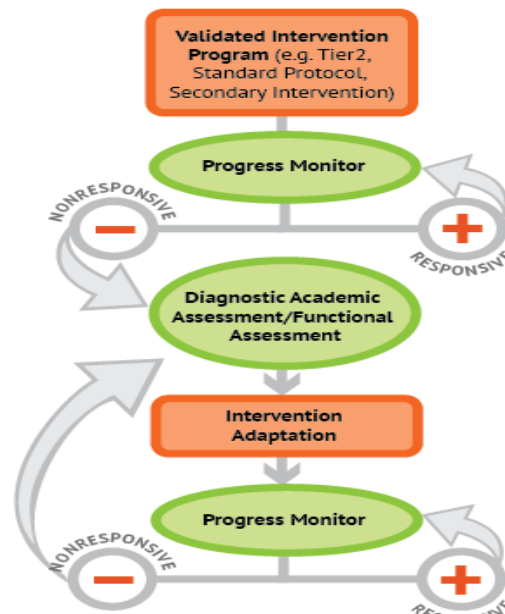
#### What is DBI?

DBI is a research-based process for individualizing and intensifying interventions through the systematic use of assessment data, validated interventions, and research-based adaptation strategies.

Click on the components in the graphic to learn more about the steps in the DBI process and find relevant resources.

[Click here to learn more about DBI.](#)

[View this video to learn why](#)



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### Spotlight on Sample Lessons & Activities

Find lessons and activities to support students struggling with computation of fractions.



[View the lesson](#)

### Tell Us What You Think!

The Center is seeking feedback about its web-based resources. Share your

[www.intensiveintervention.org](http://www.intensiveintervention.org)

# Tools Charts

## Academic Intervention

This tools chart presents information about studies that have been conducted about academic intervention programs. The first tab, *Study Quality*, includes ratings from our TRC members on the technical rigor of the study design. The second tab, *Effect Size*, includes information about the results of the studies. The third tab, *Intensity*, provides information related to the implementation of the program as an intensive intervention. The fourth tab, *Additional Research*, provides information about other studies and reviews that have been conducted on the intervention. **Additional information** is provided below the chart.

Grade Level  Subject

Study Quality  Effect Size  Intensity  Additional Research

- Academic Progress Monitoring  
<http://www.intensiveintervention.org/chart/progress-monitoring>
- Academic Intervention  
<http://www.intensiveintervention.org/chart/instructional-intervention-tools>
- Behavioral Progress Monitoring  
<http://www.intensiveintervention.org/chart/behavioral-progress-monitoring-tools>
- Behavioral Intervention  
<http://www.intensiveintervention.org/chart/behavioral-intervention-chart>

Title▲	Study	Participants ①	Design ①	Fidelity of Implementation ①	Measures Targeted ①	Measures Broader ①
Academy of MATH	Torlaković (2011)	●	●	○	●	●
Academy of READING	Fiedorowicz & Trites (1987)	●	○	○	○	●
Academy of READING	Torlaković (2011)	●	○	○	●	○
Core Reading	Dubal, Hamly, Pavlov, Richards, Yambo, et al. (2012)	○	○	○	○	○
Core Vocabulary Instruction	Nelson, Vadasy, & Sanders (2011)	●	●	○	●	●
Guided Core Reading Instruction	Smith, Nelson-Walker, Fien, Smolkowski & Baker (2013)	●	●	●	●	●
Open-Response Free Reading	Torgesen, Myers, Schirm, Stuart, Vartivarian, et al. (2006)	●	○	●	●	●
Fast Forward Language Series	Slattery (2003)	○	○	●	●	●
Fast ForWord Language Series	Miller, Merzenich, Tallal, DeVivo, Linn, et al. (1999)	●	●	○	●	○

# DBI Training Series

- Eight training modules focusing on components of DBI for academics and behavior
- One module focused on readiness and action planning
- Include:
  - Slides and speaker notes
  - Activities
  - Coaching guides

## DBI Training Series

This series of training modules developed by the National Center on Intensive Intervention (NCII) is aimed at district or school teams involved in initial planning or implementation of data-based individualization (DBI) as a framework for providing intensive intervention in academics and behavior. The modules listed below provide an overview of the DBI process and more in-depth exploration of the various components of DBI. Each module is intended as a component of comprehensive professional development that includes supplemental coaching and ongoing support. The modules should be delivered by a trained, knowledgeable professional. Presentation slides or videos, handouts, and a coaching guide with suggested coaching activities are provided.

### 1) Introduction to Data-Based Individualization (DBI): Considerations for Implementation in Academics and Behavior

This module provides a rationale for intensive intervention and an overview of DBI, NCII's approach to intensive intervention. DBI is a research-based process for individualizing validated interventions through the systematic use of assessment data to determine when and how to intensify intervention. Two case studies, one academic and one behavioral, are used to illustrate the process, highlighting considerations for implementation.

<http://www.intensiveintervention.org/content/dbi-training-series>

# Webinars

View archived webinars and look for announcements about the next live webinar:  
[www.intensiveintervention.org](http://www.intensiveintervention.org)

## Webinars

A webinar (Web + Seminar) is a short presentation that you can view from our site and watch at a time that works best for you. Our webinars are presented by experts in the field of special education and data-based individualization in academics and behavior. To search through all of our resources by keyword, use the **Advanced Search**.

### **Data Rich, Information Poor? Making Sense of Progress Monitoring Data to Guide Intervention Decisions – February 2014 (1:11:34)**

*Developed By: National Center on Intensive Intervention*

This webinar, led by Drs. Lynn Fuchs and Lee Kern of Lehigh University addresses a challenge faced by many teachers: feeling inundated by data while struggling to find useful information to guide intervention decision-making

### **Bringing Families to the Table: Family Engagement for Struggling Students – October 2013 (59:26)**

*Developed By: National Center on Intensive Intervention*

This webinar, presented by Kate Augustyn, Debra Jennings, and Kelly Orginski, discusses the importance of family engagement and provides examples of ways to engage families to support students.

### **Using Secondary Interventions to Set the Foundation for Effective Intensive Intervention – June 2013 (30:38)**

*Developed By: National Center on Intensive Intervention*

This webinar, presented by **Laura Magnuson**, a technical assistance provider for NCII, provides an overview of the rationale and purpose for secondary or Tier II interventions.

### **Selecting Evidence-Based Tools for Implementing Intensive Intervention – May 2013 (37:11)**

*Developed By: National Center on Intensive Intervention*

This webinar presented by **Dr. Allison Gruner Gandhi**, reviews the NCII tools chart on academic interventions, and how practitioners can use these charts to gather information about, and ultimately select, interventions that meet their needs.

### **Monitoring Student Progress for Behavioral Interventions – April 2013 (1:10:53)**

*Developed By: National Center on Intensive Intervention*

This webinar presented by Dr. Daniel Maggin, shares methods for collecting behavioral data, procedures for examining behavioral data, and discusses using behavioral progress monitoring to make programming decisions.

# Sample Lessons & Activities

## Adaptation Guide: Fractions as Numbers

### Purpose and Overview of Guide

The purpose of this guide and companion materials is to support developing and implementing lessons for students who need intensive instruction in the area of understanding fractions as numbers. Special education teachers, mathematics interventionists, and others working with students struggling in the area of fractions may find this guide helpful. Additional sample activities, worksheets, and supplemental materials are also available for download on the NCII website.

Within the Common Core State Standards, fractions are taught in Grades 3–5. This guide may be used as these concepts are introduced or with students in higher grade levels who continue to struggle with the concepts.

### Sequence of Skills—Common Core State Standards

Develop an understanding of fractions as numbers:

- Part/whole relationship
- Number on the number line
- Equivalent fractions
- Whole numbers as fractions
- Comparing fractions

<http://www.intensiveintervention.org/resources/sample-lessons-activities/mathematics>

# Examples of Standards-Aligned Instructions Across Tiers

## Planning Standards-Aligned Instruction Within a Multi-Tiered System of Supports Decoding Example

**Common Core State Standard Addressed**  
Common Core State Standard RF 1.3.B. Decode regularly spelled one-syllable words.

### Core Instruction

1. Implement a standards-aligned reading program that includes regularly occurring explicit instruction in simple and complex letter-sound relationships.
2. Emphasize generalized knowledge of one-syllable word patterns (e.g., VC, CVC, CCVC, CCVCC).
3. Provide peer-mediated and independent practice opportunities for automatic, rapid processing of one-syllable words. Provide explicit feedback, including error correction.
4. Incorporate class-wide motivation strategies to promote engagement and on-task behavior, with individualized supports for students receiving supplemental intervention.
5. Periodically assess learning of all students using grade-level appropriate screeners (WIF, NNF, ORF) to determine the effectiveness of core instruction and identify students in need of additional supports.<sup>1</sup>

### Secondary Intervention

1. Use companion evidence-based materials that align with the core program (if available), or an evidence-based intervention program that emphasizes developing decoding skills.
2. Provide explicit preteaching of skills underlying core content (e.g., identifying onset and rime).
3. Provide small-group instruction with frequent and varied response formats and explicit corrective feedback.
4. Incorporate small-group or individual behavior strategies targeted to individual needs in engagement and motivation.
5. Collect progress monitoring data on word reading fluency and phonological awareness at least one or two times per month using a valid, reliable tool.<sup>2</sup>

### Intensive Intervention

1. Use progress monitoring and error analysis data to identify specific skill deficits and possible adaptations to the secondary intervention.
2. Break explicit instruction in foundational skills into small steps focusing on decoding one type of word pattern (e.g., VC, CVC) at a time beginning

### Alternate Achievement Standards<sup>4</sup>

1. Provide instruction appropriate to a student's level of cognitive and symbolic functioning.
2. Use precise, simple language.
3. Provide explicit instruction and modeling in foundational skills that underlie the standard such as letter identification, sound-letter correspondence, and

Reading Examples	Mathematics Examples
Phonemic and Phonological Awareness 📄	Computation of Fractions 📄
Decoding 📄	Fractions as Numbers 📄
Spelling 📄	Number System/Counting 📄
Fluency 📄	Place Value 📄
Vocabulary 📄	Basic Facts 📄
Comprehension 📄	Algebra 📄

<http://www.intensiveintervention.org/illustration-standards-relevant-instruction-across-levels-tiered-system>

# Individual Student Meeting Tools

## Description of adapted student plan:

Person(s) responsible for delivering intervention, including any adaptations:

Curriculum materials used:

Group size:

Sessions per week:

Minutes per session:









Additional resources or support needed:

How will progress be monitored?



- Person responsible for collecting progress-monitoring data:
- Frequency of data collection:
- Progress-monitoring measure or tool:

How will we know if the intervention is working (is there a clearly defined goal)?

Goal:

Pre-Meeting	Initial Meeting	Progress Monitoring Meeting
Process Guidance Document 	Agenda 	Agenda 
Referral Form 	Facilitator's Guide 	Facilitator's Guide 
	Participant Guide 	Participant Guide 
	Note-taking Template 	Note-taking Template 

## Additional Handouts

- Ask Clarifying Questions to Create Hypothesis 
- Intensification Strategy Checklist Handout 

<http://www.intensiveintervention.org/tools-support-intensive-intervention-data-meetings>

# NCII's Intervention Tools Chart Provides reviews of Secondary Intervention Programs

<http://www.intensiveintervention.org/resources/tools-charts>

**NCII NATIONAL CENTER ON INTENSIVE INTERVENTION**  
at American Institutes for Research

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Study Quality    Effect Size    Intensity    Additional Research

Title ▲	Study	Participants ①	Design ②	Fidelity of Implementation ③	Measures Targeted ④	Measures Broad ⑤
Academy of READING	Fiedorowicz & Trites (1987)	●	●	●	●	●
AWARD Reading	Block, & Mangieri (Tech. Rep.)	●	●	●	●	—
Failure Free Reading	Torgesen, Myers, Schim, Stuart, Vartivarian, et al. (2006)	●	●	●	●	●
Fast Forward Language Series	Slattery (2003)	●	●	●	●	●
focusMATH Intensive Intervention	Styers & Baird-Wilkerson (2011)	●	●	●	●	—
Leveled Literacy Intervention System	Ransford-Kaldon, Flynt, Ross, Franceschini, Zoblotzky, et al. (2010)	●	●	●	●	●
Lexia Reading	Macaruso & Rodman (2011)	●	●	●	●	●



# IRIS Center for Resources



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# CEEDAR Center Resources



## Innovation Configuration

### Evidence-Based Reading Instruction for Grades K-5



Holly B. Lane  
University of Florida

October 2014  
CEEDAR Document No. IC-12

# Part C Resources: The Early Childhood Technical Assistance Center

## Evidenced Based Practice Resources

**ECTA Center**  
The Early Childhood Technical Assistance Center *Improving Systems, Practices and Outcomes*

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**Early Childhood Research & Reference Portal**

System Framework | DEC Recommended Practices | Implementing & Scaling Up EBP | Implementation Process | Outcomes Measurement

EVIDENCE-BASED PRACTICE | [Definitions](#) | [Practices](#) | [EC Research & Reference Portal](#)

**Evidence-Based Practice**

Topic Editor: [Sue Goode](#)

Most recent additions to this page:

- [Programs That Work: from the Promising Practices Network on Children, Families and Communities](#) (2014)
- [DEC Recommended Practices in Early Intervention/Early Childhood Special Education](#) (April 2014)

Recent federal legislation has focused on the importance of building a strong base of scientific evidence to inform educational policy and practice. As such, the [Institute of Education Sciences \(IES\)](#) was established within the U.S. Department of Education in 2002 to provide rigorous evidence on which to ground education practice and policy. IES encompasses the following national centers:

- [National Center for Education Statistics \(NCES\)](#)
- [National Center for Education Evaluation and Regional Assistance \(NCEE\)](#)
- [National Center for Education Research \(NCER\)](#)
- [National Center for Special Education Research \(NCSER\)](#)

**What is evidence-based practice?**

**Page Contents**

- What is evidence-based practice?
- Where do you find early childhood evidence-based practice?
  - Multiple Early Childhood Topics
  - Articles
  - Desk or Handouts
  - Early Child Identification
  - Early Childhood Transition

many [Topic pages](#), which are designed primarily for state and local Part C and program staff, our Early Childhood Research & Reference Portal provides access to many sources, research and reference materials for individuals at all levels of the field: program directors, researchers, policy makers, practitioners, families and advocates for children with special needs.



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# Part C Resources: Center for Social and Emotional Foundations for Early Learning



**Center on the Social and Emotional Foundations for Early Learning**



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**Resources: What Works Briefs**

What Works Briefs: Summaries of Effective Practices for Supporting Children's Social-Emotional Development and Preventing Challenging Behaviors

The Briefs describe practical strategies, provide references to more information about the practice, and include a one-page handout that highlights the major points of the Brief.

View Ordering Information (PDF)

Training Modules best viewed using the Adobe Acrobat Reader.

**Recursos en resumen**

**Éxito 1**  
Introducción a los What Works Briefs PDF | HTML  
Introducción a los Éxitos en resumen PDF

**Éxito 2**  
La comprensión del impacto de diferencias lingüísticas en el comportamiento dentro del aula por R. M. Santos y M. M. Ostrosky PDF | HTML  
Resú: PDF

**Éxito 3**  
Cómo ayudar a niños a entender las rutinas y los horarios del aula por M. M. Ostrosky, E. Y. Jung, M. L. Hemmeter y D. Thomas PDF | HTML  
Resú: PDF

**Éxito 4**  
Cómo ayudar a niños a manejar las transiciones entre actividades por M. M. Ostrosky, E. Y. Jung y M. L. Hemmeter PDF | HTML  
Resú: PDF

**Éxito 5**  
El uso de actividades y rutinas de las aulas como oportunidades de apoyar las interacciones entre compañeros por T. Bovey y P. Strain PDF | HTML  
Resú: PDF

**Éxito 6**  
El uso de estrategias ambientales para fomentar interacciones sociales positivas por T. Bovey y P. Strain PDF | HTML  
Resú: PDF

**Resources by Type:**

- Chat Sessions
- Decision Making Guidelines
- En Español
- Family Tools
- Research Syntheses
- Practical Strategies
- State Planning
- Training Kits
- Training Modules
  - Infant/Toddler
  - PreSchool
  - Pre-K Parent Modules
  - Infant/Toddler Parent Modules (POM)
- Videos
- What Works Briefs


**Resources by Groups:**

- For States
- For Trainers/Coaches
- For Families
- For Teachers/Caregivers


**Order Materials**

**Links**

## State Planning Resources



**Center on the Social and Emotional Foundations for Early Learning**




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**Resources: State Planning**

**What's Going On in Your State?**

The Center has been working in several states to support strategic planning meetings to look at what is currently going on in their state around social and emotional outcomes for children and to identify the gaps in services and resources in an effort to see what was needed. For more information about these plans, click on the individual state.



**Resources by Type:**

- Chat Sessions
- Decision Making Guidelines
- En Español
- Family Tools
- Research Syntheses
- Practical Strategies
- State Planning
- Training Kits
- Training Modules
  - Infant/Toddler
  - PreSchool
  - Pre-K Parent Modules
  - Infant/Toddler Parent

# IES Practice Guide Recommendations in Reading

1. Focus instruction on a small, targeted set of skills
2. Adjust pacing of lessons
3. Schedule multiple and extended sessions daily
4. Include opportunities for extensive practice and feedback during intervention
5. Use input from the RTI team, including precise progress monitoring data, to individualize intervention
6. Teach skills/strategies to mastery

[http://ies.ed.gov/ncee/wwc/  
publications/practiceguides](http://ies.ed.gov/ncee/wwc/publications/practiceguides)



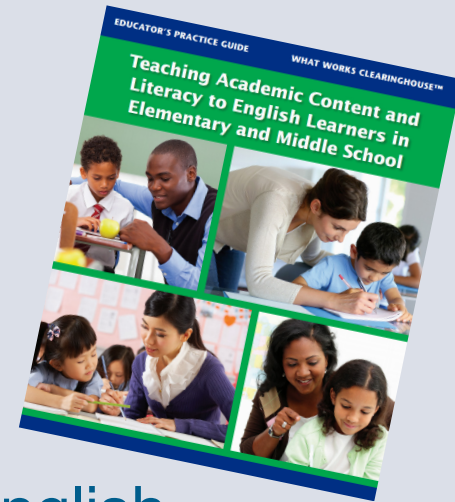
# IES Practice Guide: Teaching Content and Literacy to ELLs

Recommendation 1. Teach a set of academic vocabulary words intensively across several days using a variety of instructional activities.

Recommendation 2. Integrate oral and written English language instruction into content area teaching

Recommendation 3. Provide regular, structured opportunities to develop written language skills. Recommendation 4.

Provide small-group instructional intervention to students struggling in areas of literacy and English language development



# IES Practice Guide: Adolescent Literacy

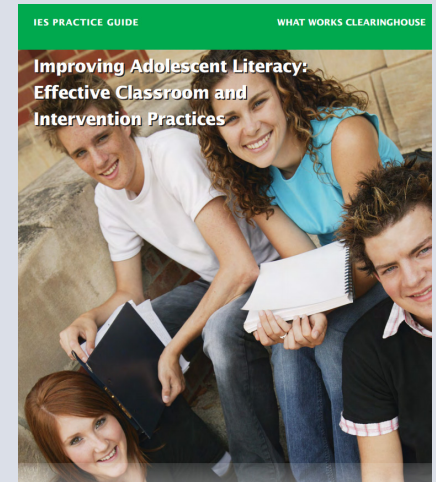
Recommendation 1. Provide explicit vocabulary instruction

Recommendation 2. Provide direct and explicit comprehension strategy instruction

Recommendation 3. Provide opportunities for extended discussion of text meaning and interpretation

Recommendation 4. Increase student motivation and engagement in literacy learning

Recommendation 5. Make available intensive and individualized interventions for struggling readers that can be provided by trained specialists



# Report of the National Early Literacy Panel

- <http://lincs.ed.gov/publications/pdf/NELPReport09.pdf>





# Questions



# For More Information



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# Disclaimer

- This module was produced under the U.S. Department of Education, Office of Special Education Programs, Award No. H326Q110005. Celia Rosenquist serves as the project officer.
- The views expressed herein do not necessarily represent the positions or policies of the U.S. Department of Education. No official endorsement by the U.S. Department of Education of any product, commodity, service or enterprise mentioned in this website is intended or should be inferred.

# References

- Aud, S., Hussar, W., Johnson, F., Kena, G., Roth, E., Manning, et al. (2012). *The condition of education 2012* (NCES 2012-045). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://nces.ed.gov/pubs2012/2012045.pdf>
- Capizzi, A. M., & Fuchs, L. S. (2005). Effects of curriculum-based measurement with and without diagnostic feedback on teacher planning. *Remedial and Special Education*, 26(3), 159–174.
- Cortiella, C. (2011). *The state of learning disabilities*. New York: National Center for Learning Disabilities. Available at <http://gradnation.org/sites/default/files/The%20State%20of%20Learning%20Disabilities.pdf>
- Deno, S. L., & Mirkin, P. K. (1977). *Data-based program modification: A manual*. Minneapolis, MN: Leadership Training Institute for Special Education.

# References

- Fuchs, L. S., Deno, S. L., & Mirkin, P. K. (1984). The effects of curriculum-based measurement evaluation on pedagogy, student achievement, and student awareness of learning. *American Educational Research Journal*, 21(2), 449–460.
- Fuchs, L. S., Fuchs, D., & Hamlett, C. L. (1989). Effects of instrumental use of curriculum-based measurement to enhance instructional programs. *Remedial and Special Education*, 10, 43–52.
- Fuchs, L.S., Fuchs, D., Powell, S.R., Seethaler, P.M., Cirino, P.T., & Fletcher, J.M. (2008). Intensive intervention for students with mathematics disabilities: Seven principles of effective practice. *Learning Disability Quarterly*, 31, 79–92.
- Planty, M., Hussar, W., Snyder, T., Provasnik, S., Kena, G., Dinkes, R., et al. (2008). *The condition of education 2008* (NCES 2008-031). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://nces.ed.gov/pubs2008/2008031.pdf>

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