

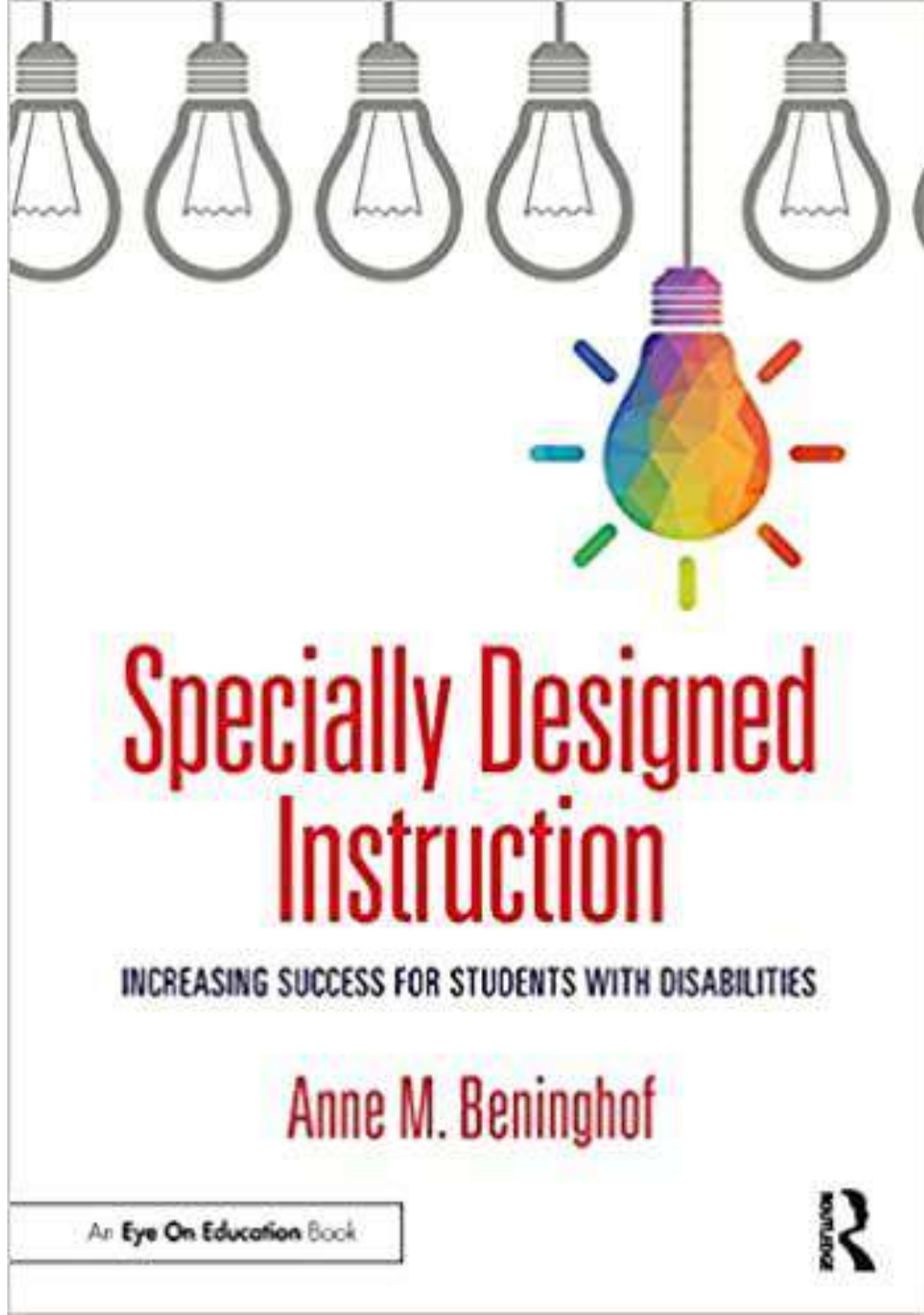
# Statewide Book Study: Specially Designed Instruction

Introductory Meeting

February 11, 2025

Deana Smith



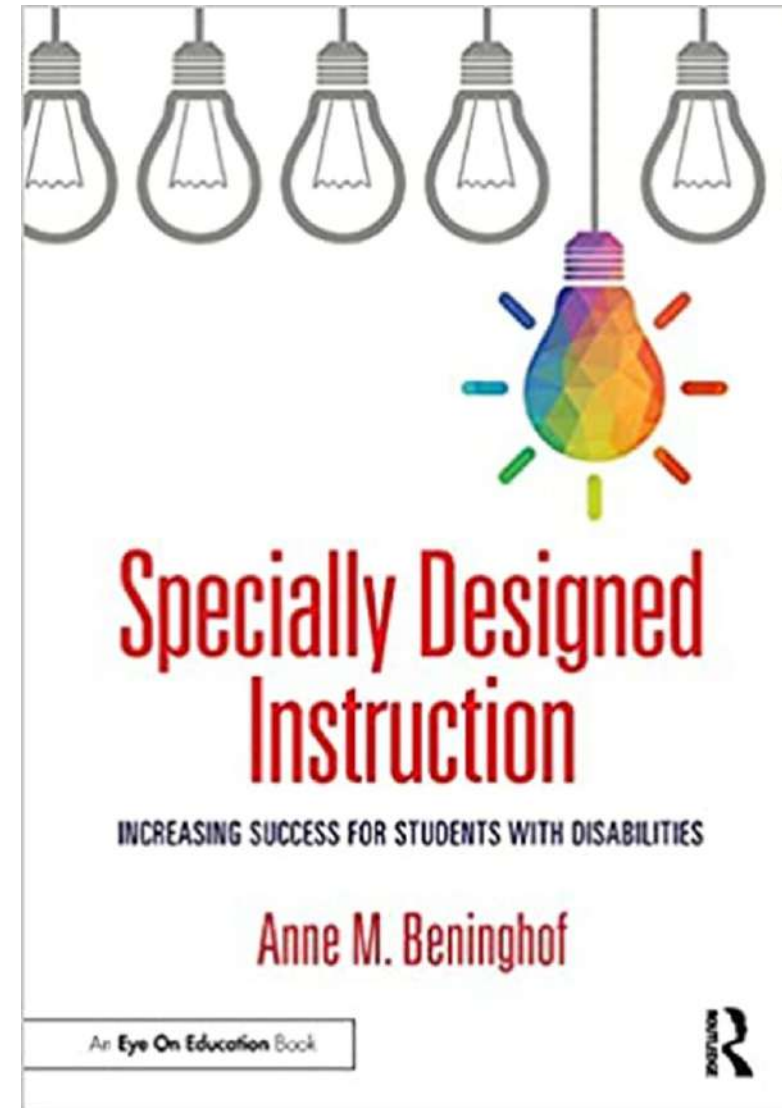


## Book Study Outline

- February 11: Introductory meeting
- February 18: Introduction & Part 1: Envisioning SDI (Introduction & Ch. 1 – 4, Pages 1 – 45)
- March 4: Part 2: Planning for SDI (Ch. 5 – 10, Pages 47 – 127)
- March 18: Part 3: Fulfilling the Promise of SDI (Ch. 11 – 13, & Appendix A Pages 129 – 180)
- Make up meeting, if needed – PTSB/STARS credit

# What You Can Expect...

- Road map to provide specially designed instruction
- Answers to the most frequently asked questions around special education services into the general education classroom eg. What is SDI? Who is responsible? How do we make it happen?
- Practical examples, worksheets, and prep tools for ready-to-use ideas



# PTSB and/or STARS credit



## Participation requirements to receive PTSB and/or STARS:

- Read and participate in four 1-hour virtual meetings
- .5 PTSB credit
- 7.5 hours STARS credit
- Attendance form at the end of each session is required
- Certificate of attendance will be emailed to each individual following the final meeting once attendance has been verified

# Meet the Author...

## **Anne M. Beninghof**

- Over 40 years experience
- Special education teacher
- Adjunct faculty member of University of Harvard and the University of Colorado
- Internationally recognized consultant and trainer
- Author of 13 books, blogs, podcasts, educational videos



# February 11: Introductory Meeting

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- Review the 6 Guiding Principles of IDEA
- Define specially designed instruction
- Determine the differences between:
  - Explicit Instruction
  - High Leverage Practices
  - Intensive Intervention
  - Multi-tiered Systems of Support
  - Specially Designed Instruction

- 1. Who is joining us?**
- 2. What do you know about SDI?**





# Acronyms

- EI: Explicit Instruction
- HLPs: High Leverage Practices
- II: Intensive Intervention
- MTSS: Multi-tiered Systems of Support
- SDI: Specially Designed Instruction

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Since 1975 in the EDUCATION FOR ALL HANDICAPPED CHILDREN ACT, Special Education has been defined as –

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**SPECIALLY DESIGNED INSTRUCTION**

## 34 C.F.R. §300.39(a)

Special education means **specially designed instruction**, at **no cost** to the parents, to meet the **unique needs** of a child with a disability, including—

- (i) Instruction conducted in the classroom, in the home, in hospitals and institutions, and in other settings; and
- (ii) Instruction in physical education.

# The IDEA says...

34 C.F.R. §300.39(b)

Specially Designed Instruction means

**Adapting**, as appropriate to the needs of an eligible child under this part, the **content**, **methodology**, or **delivery** of instruction –

- (i) To **address the unique needs** of the child that result from the child's disability; and
- (ii) To **ensure access** of the child to the general curriculum, so that the child can meet the educational standards within the jurisdiction of the public agency that apply to all children.

“In order to have the best specially designed instruction for students with disabilities, we need to begin with imagining it. What does it look like? What is the foundational framework and how might we break this down so that the pieces are manageable?” (p.3)



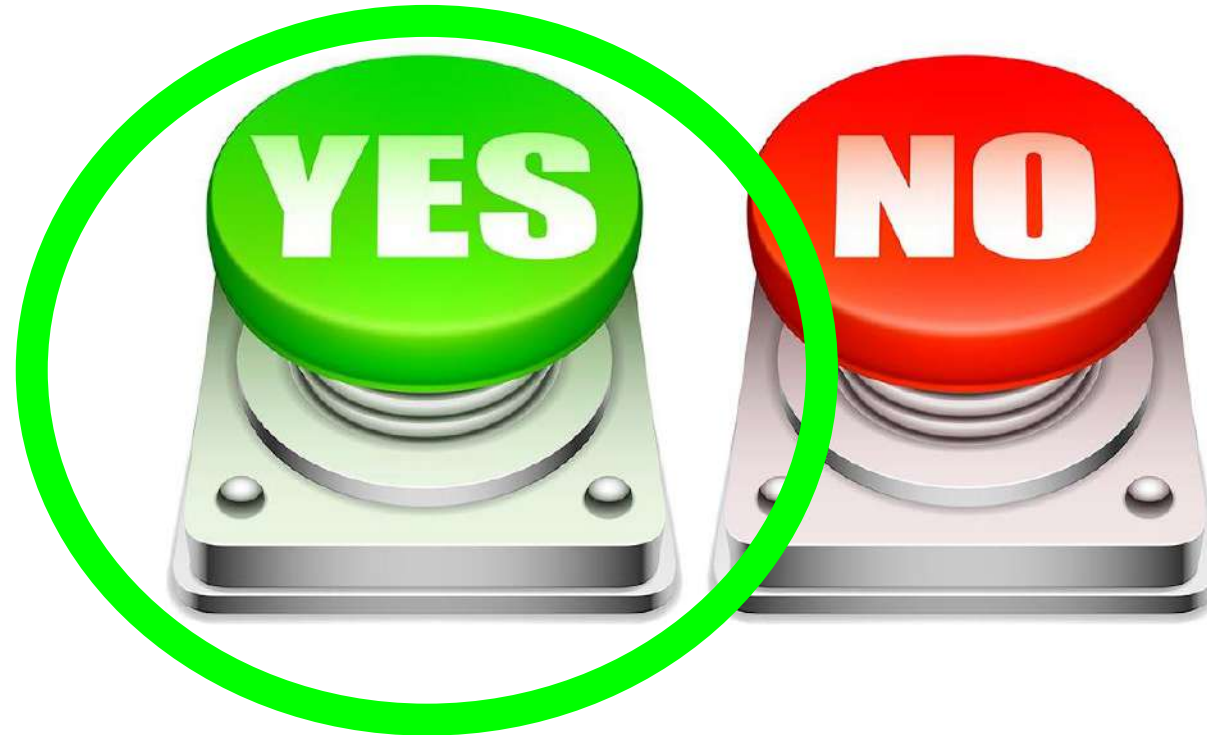
# What do we know about Specially Designed Instruction?



Our school provides differentiated instruction for all students. Is SDI still needed?



Our school provides differentiated instruction for all students. Is SDI still needed?





Special Education is a place where instruction occurs.



Special Education is a place where instruction occurs.



Can SDI be implemented without an Individualized Education Program (IEP)?



Can SDI be implemented without an Individualized Education Program (IEP)?



Specially designed instruction is what a student does.



Specially designed instruction is what a student does.



The amount of specially designed instruction can be changed by a teacher.



The amount of specially designed instruction can be changed by a teacher.

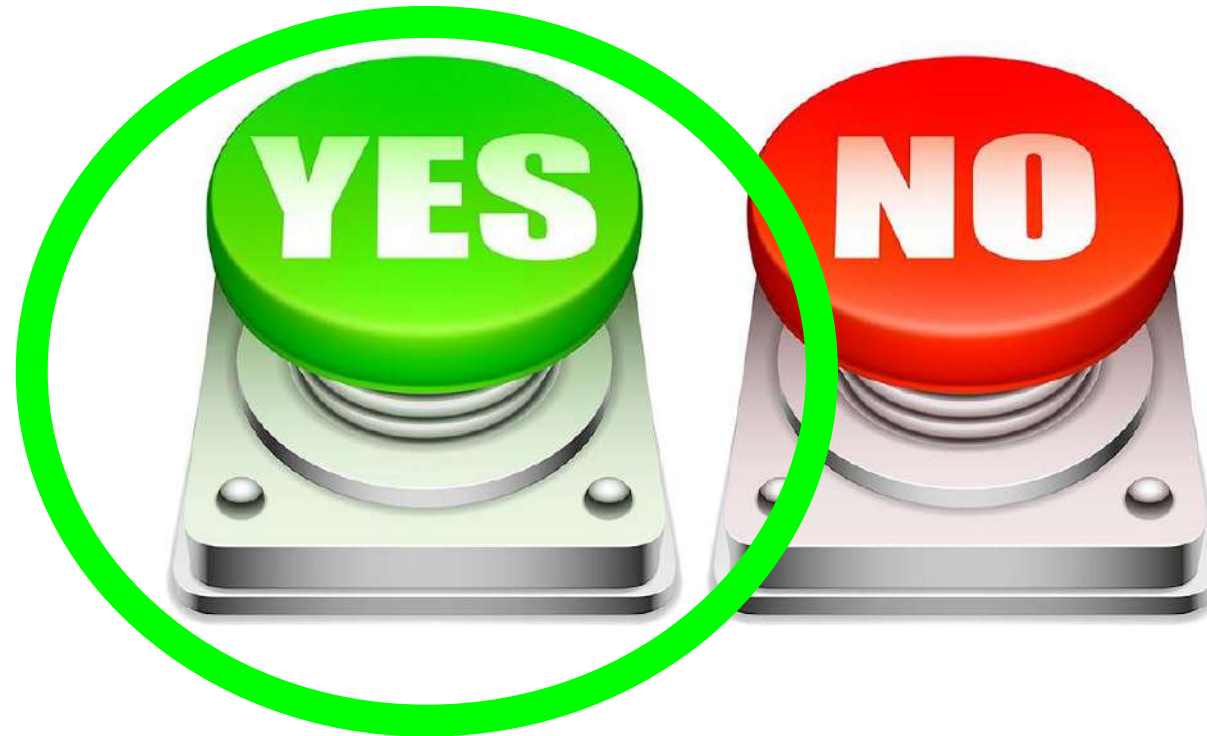




An intentional decrease in pacing is likely to be an example of adapted delivery.



An intentional decrease in pacing is likely to be an example of adapted delivery.



The amount of specially designed instruction is determined by staffing and/or scheduling.



The amount of specially designed instruction is determined by staffing and/or scheduling.



Are HLPs, SDI, EI, and II the same thing?



Are HLPs, SDI, EI, and II the same thing?



SDI is based  
on student  
need.



It starts with the team!



Identification of needs requires a comprehensive evaluation and ongoing review of data.



Evaluation and a review of functioning across environments leads to present levels of need.



The team determines the amount, type, frequency, duration of **SPECIALLY DESIGNED INSTRUCTION.**



FAPE

Procedural Safeguards

Appropriate Evaluation

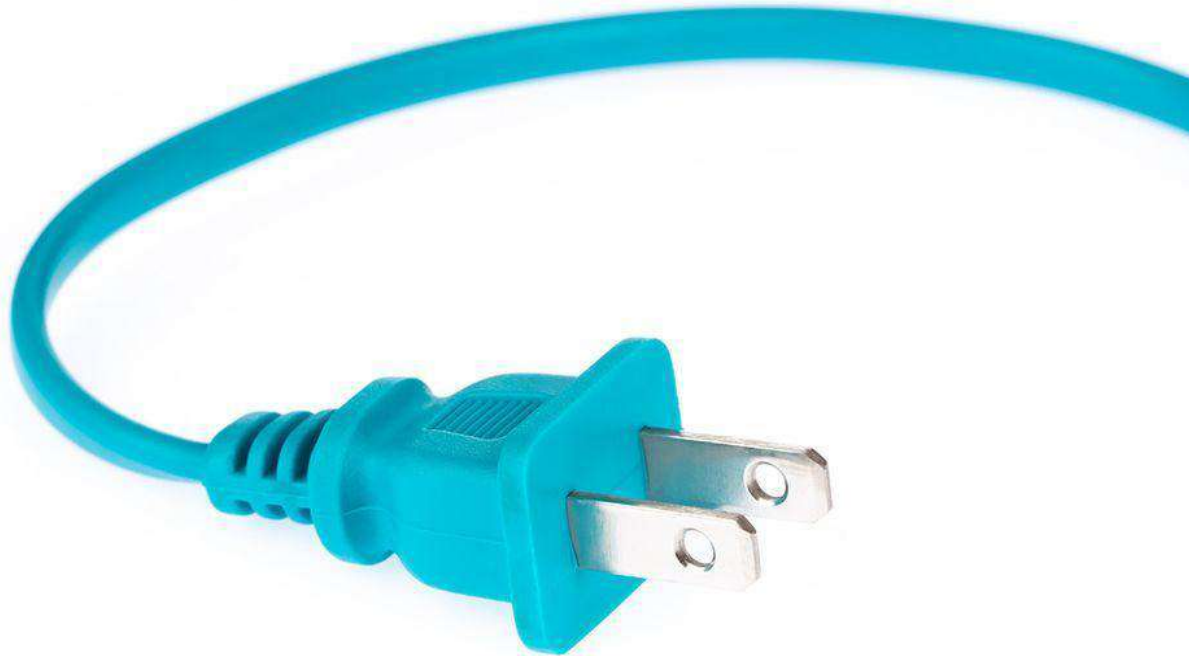
IDEA

Parent & Student Participation

IEP

LRE





**Prong 1:** Must have an IDEA disability



**Prong 2:** Must require special education and related services as a result of the disability to benefit from public education



**IDEA Eligibility**

# No Educational Need?

If the disability does not adversely affect educational performance, the student is NOT eligible under IDEA. 34 C.F.R. §300.8.

If the child does not need special education, or specially designed instruction, the child is NOT eligible under IDEA. 34 C.F.R. §300.8.

If the student only needs a related service and NOT specially designed instruction, the student is NOT eligible under IDEA. 34 C.F.R. §300.8.





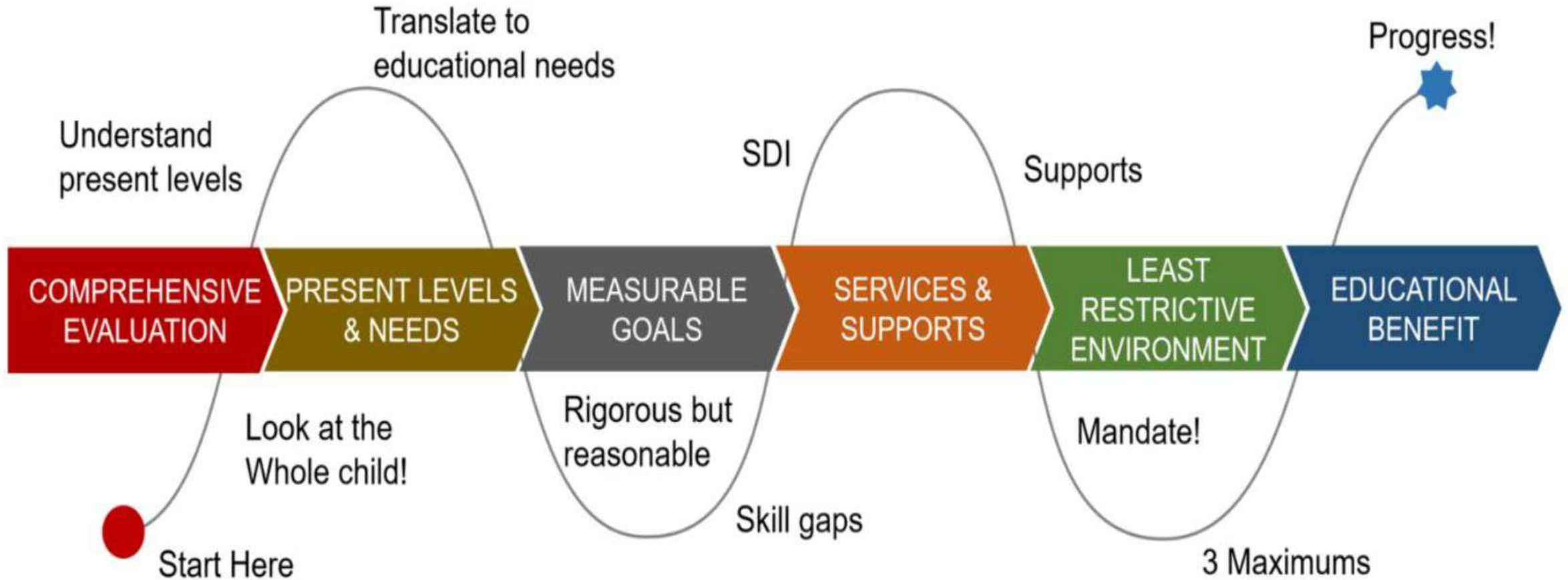
**Free:** requires that the education of each child with a disability must be provided at public expense and at no cost to the child's parents.


**Appropriate:** means that each child with a disability is entitled to an education that is "appropriate" for his or her needs.

**Public:** refers to the public school system. The public school system must educate students with disabilities, respond to their individual needs, and help them plan for their future.

**Education:** School age children with disabilities will receive a public education that includes special education and related services, preparing them for further education, employment, and independent living.

# The FAPE Continuum





# Individualized Education Program (IEP)

- Present Levels of Academic Achievement and Functional Performance (PLAAFP)
- Statement of Measurable Annual Goals
- Description of how child's progress toward meeting annual goals will be measured
- Special education/related services/supplementary services
- Statement of program modifications or supports for school personnel



# Least Restrictive Environment (LRE)

300.114 LRE requirements.

(a) General.

(1) Except as provided in §300.324(d)(2) (regarding children with disabilities in adult prisons), the State must have in effect policies and procedures to ensure that public agencies in the State meet the LRE requirements of this section and §§300.115 through 300.120.

(2) Each public agency must ensure that—

(i) To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled; and

(ii) Special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.

# Least Restrictive Environment

## MAXIMUM

- To the maximum extent appropriate, children with disabilities are provided supplementary aids and services to enable them to be educated with children who are nondisabled. 34 C.F.R. §300.42.

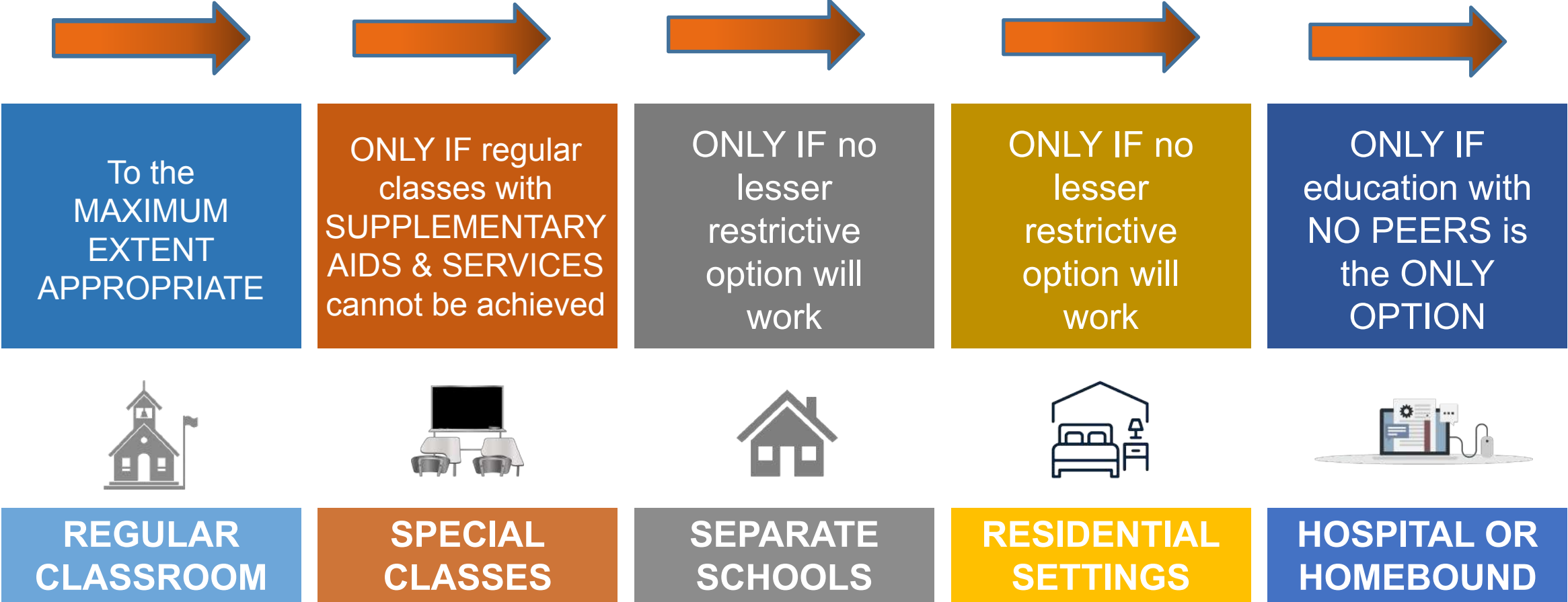
## MAXIMUM

- To the maximum extent appropriate, children with disabilities are educated with children who are nondisabled. 34 C.F.R. §300.114.

## MAXIMUM

- To the maximum extent appropriate, children with disabilities are able to participate in extracurricular activities with children who are nondisabled. 34 C.F.R. §300.117.

# LRE Continuum







# Parent Participation in Decision Making

[300.322](#) Parent participation.

- Public agency responsibility
  - One or both parents have an opportunity to participate in the IEP meeting:
    - Notification early enough to participate
    - Mutually agreed time/place
- Information is provided to parents
  - Indicate purpose, time, location
  - Who will attend
  - If student is 16 – must indicate postsecondary goals and transition services
- Other methods of parent participation
  - Phone calls, virtual
- Conducting a meeting without a parent
  - Document, document, document
- Use of interpreters or other action, as appropriate
  - Language eg. Spanish, ASL
- Copy of child's IEP provided to parent at no cost to the parent

Transition aged students should be invited to the IEP as appropriate.



# Parent Participation in Decision Making

[300.322](#) Parent participation.

- Public agency responsibility
  - One or both parents have an opportunity to participate in the IEP process
    - Notification early enough to participate
    - Mutually agreed to
- Inform

**Meaningfully participate**

– must indicate postsecondary goals and transition services

## Other methods of parent participation

- Phone calls, virtual
- Conducting a meeting without a parent
  - Document, document, document
- Use of interpreters or other action, as appropriate
  - Language eg. Spanish, ASL
- Copy of child's IEP provided to parent at no cost to the parent

Transition aged students should be invited to the IEP as appropriate.



# Student Participation in Decision Making

- Transition-aged students should be invited to their IEP, as appropriate.
- The Individuals with Disabilities Education Act (IDEA) requires that students be invited to their IEP meetings when they are 14 or older. However, the student's attendance is not required.

# Procedural Safeguards

WDE  SPECIAL EDUCATION

Notice of Procedural Safeguards  
Individuals with Disabilities Education Act

JULY 2021



- [Notice of Procedural Safeguards Rev. 2021](#)
- [Notice of Procedural Safeguards Rev. 2021 \(Spanish\)](#)

# Need-Based

ALL IEP decisions are based on educational need.



IEP decisions are not driven by:

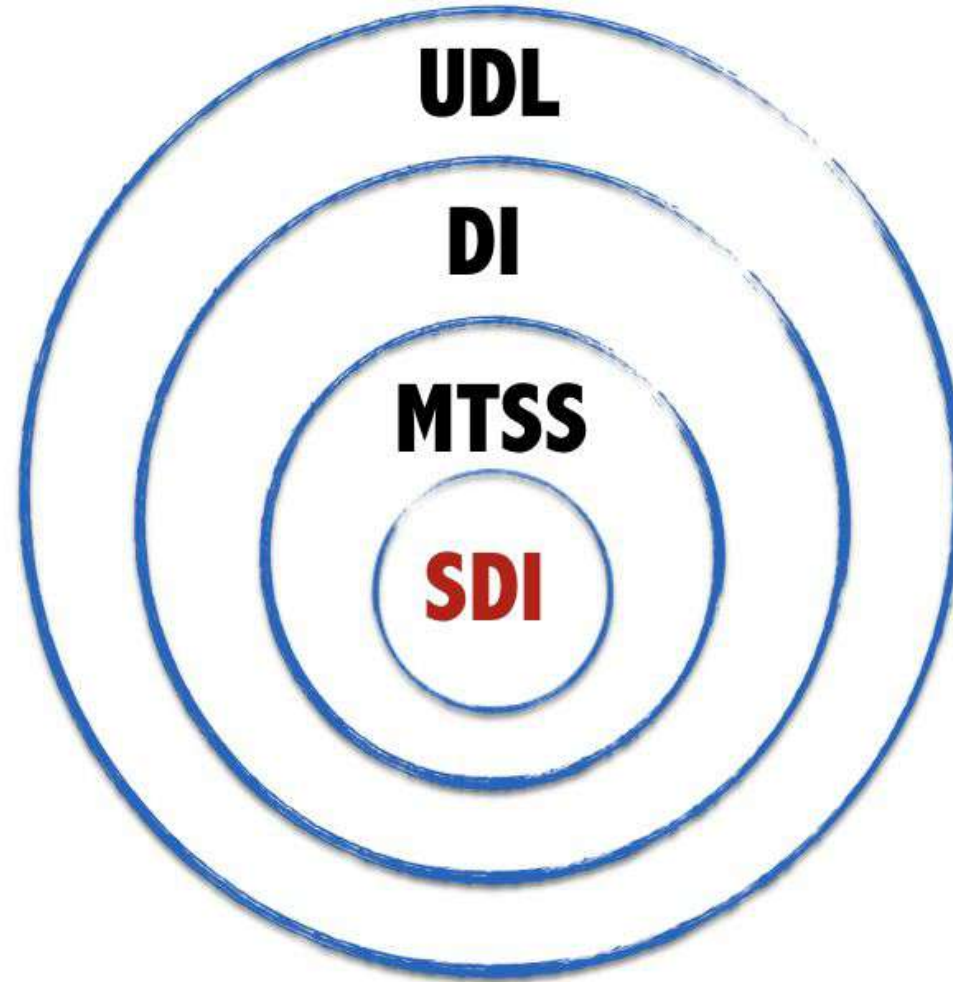
Cost

Location

Preference

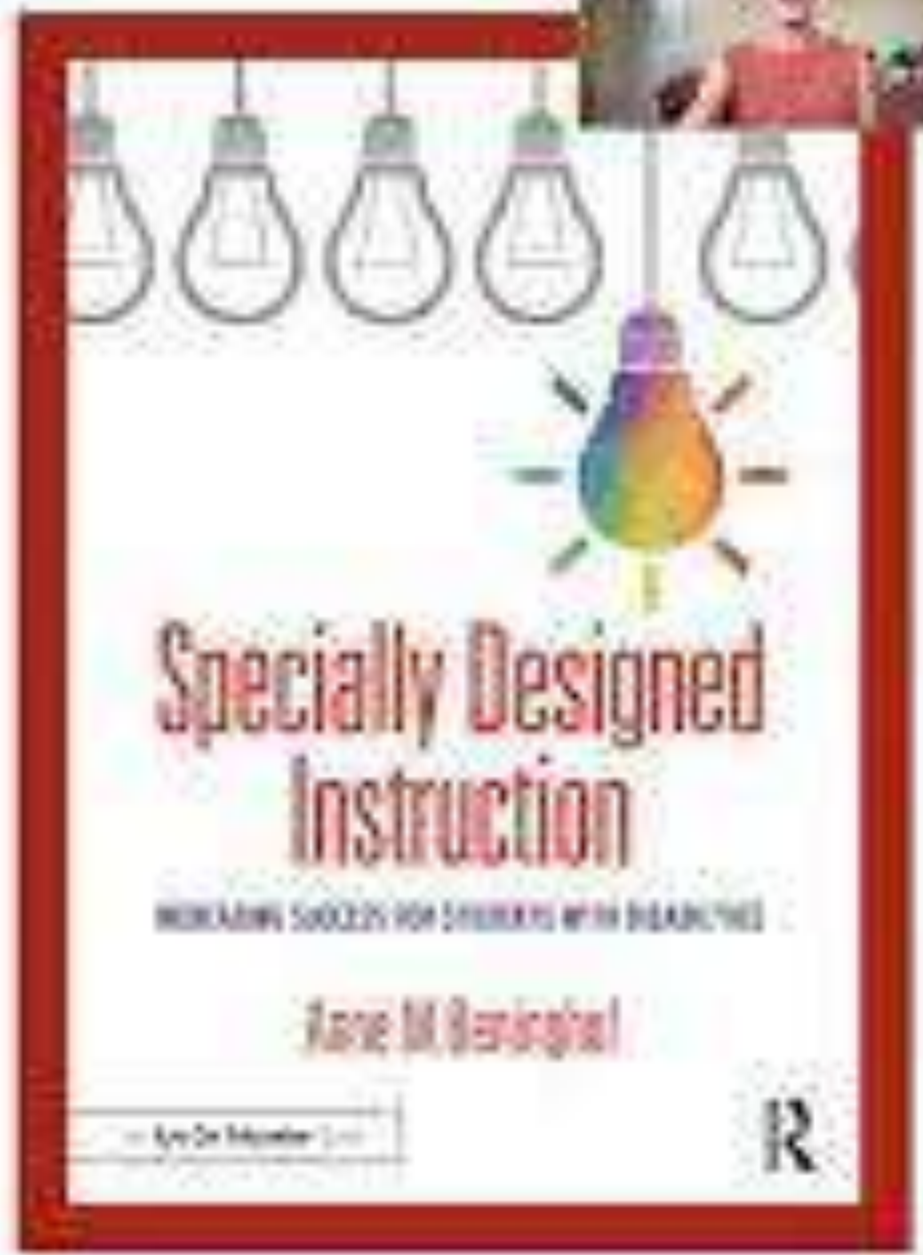
Schedules

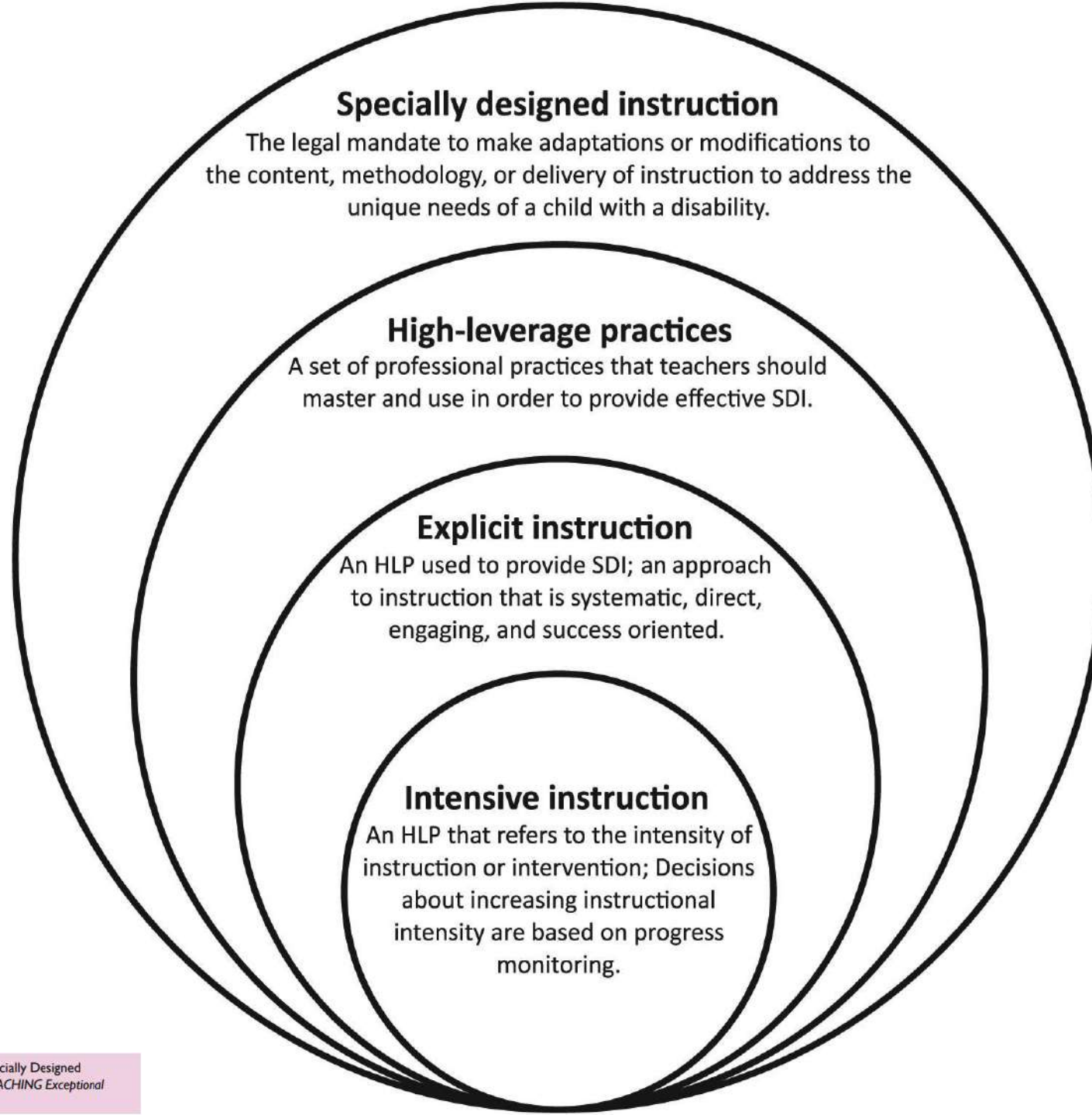
# Specially Designed Instruction in Context



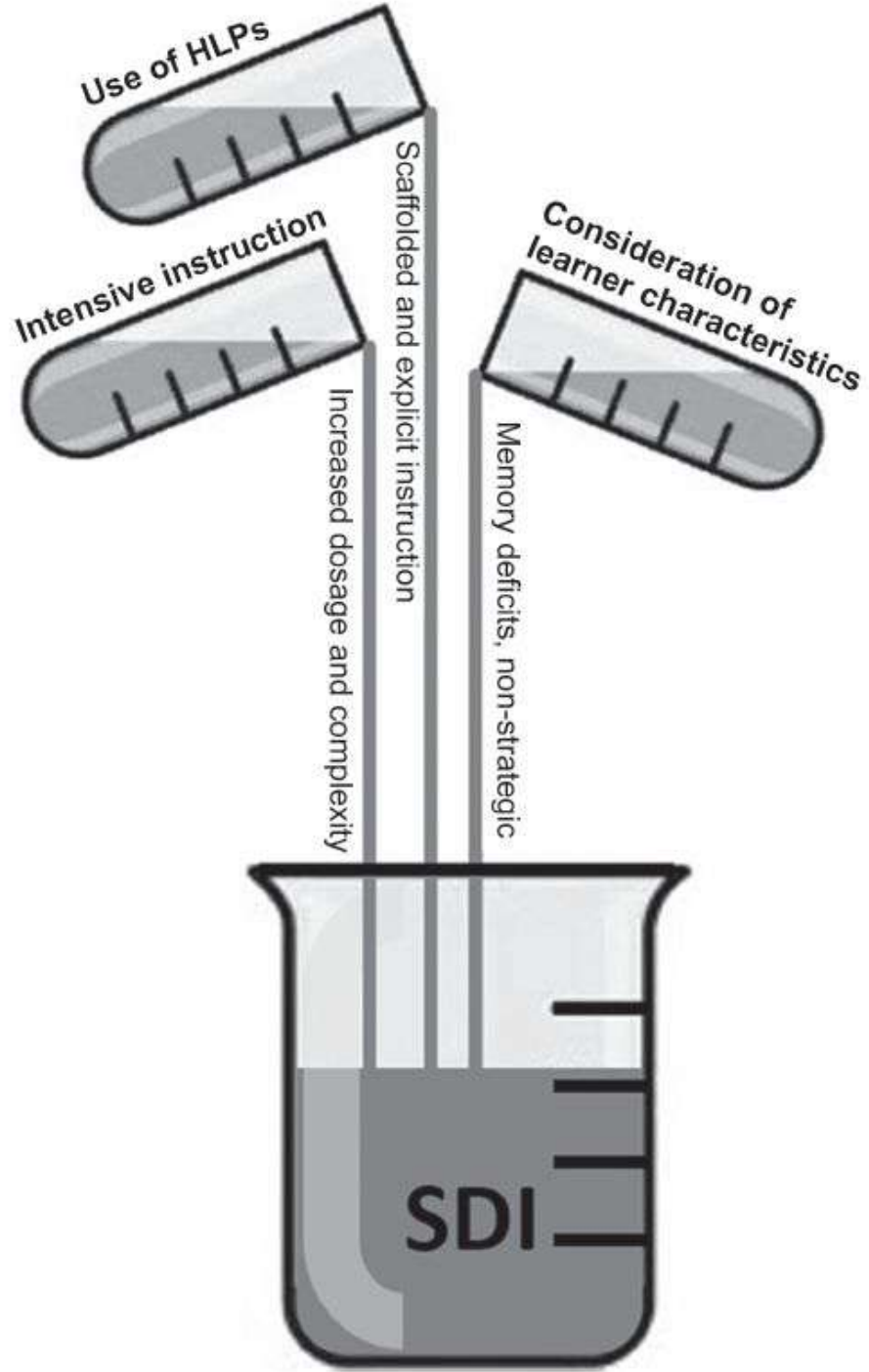


# What's the difference?









Riccomini, P. J., Morano, S., & Hughes, C. A. (2017).  
<https://doi.org/10.1177/0040059917724412>

# Elements of SDI

## Content

- ***What*** is taught to allow the student access to general education programming

## Methodology

- ***How*** the instruction is delivered or the practices and approach the teacher uses to teach

## Delivery of Instruction

- ***Who, where,*** and ***when*** the instruction is delivered

# What's Next?

February 18: Introduction & Part 1: Envisioning SDI (Introduction & Ch. 1 – 4, Pages 1 – 45)

In preparation:

1. Read pages 1 - 45.
2. Have access and review at least one IEP.

# SDI Resources

SDI 3-part series with Dr. Tessie Bailey

<https://wyominginstructionalnetwork.com/professional-development/waves/>

# Self-paced Modules from WDE:

- Individualized Education Program (IEP)
- Special Education Law
- Specially Designed Instruction Series
- The Special Education Process

Enroll here for the modules on SDI:

<https://wde.catalog.instructure.com/browse/wde/courses/specially-designed-instruction-sdi>

# Resources

- Beninghof, A. M. (2022). *Specially designed instruction: Increasing success for students with disabilities*. Routledge.
- *Progress center*. American Institutes for Research. (n.d.). Retrieved February 28, 2023, from <https://www.air.org/centers/progress-center>
- Riccomini, P. J., Morano, S., & Hughes, C. A. (2017). Big Ideas in Special Education: Specially Designed Instruction, High-Leverage Practices, Explicit Instruction, and Intensive Instruction. *TEACHING Exceptional Children*, 50(1), 20–27.  
<https://doi.org/10.1177/0040059917724412>
- Rodgers, W. J., & Weiss, M. P. (2019). Specially Designed Instruction in Secondary Co-Taught Mathematics Courses. *TEACHING Exceptional Children*, 51(4), 276–285.  
<https://doi.org/10.1177/0040059919826546>
- YouTube sep 22, 2021 SDI: What is it and why do we provide it?  
<https://www.youtube.com/watch?v=ARVcul1cxKg>

Thank you!

A decorative graphic featuring the text "Thank you!" in a black, cursive script. The text is surrounded by several gold, five-pointed stars of varying sizes. Below the text is a thick, gold brushstroke that curves under the words, ending in a small, upward-pointing flourish. The background is white with a few small black dots scattered around the stars.

# Attendance form for Introductory session

<https://forms.gle/BgUEXiWXdzPVvjuQ9>





# *“Specially Designed Instruction”*

adapting...the **content, methodology, or delivery** of instruction

- to address the unique needs of the child that result from the child’s disability
- to ensure access of the child to the general curriculum, so that the child can meet the educational standards that apply to all children

**“Specially designed instruction should be implemented in addition to, not in place of, differentiated instruction.”**

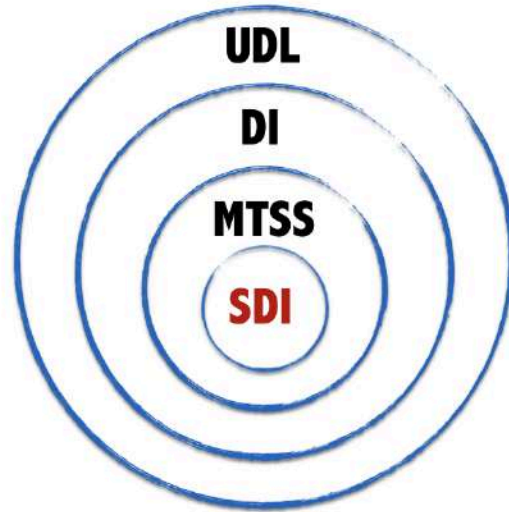
ESC Region 20, TX, *Specially Designed Instruction: A Resource for Teachers*

An **accommodation** is a change in materials or procedures that enables students to participate in the curriculum and assessment in a way that allows their abilities and knowledge to be expressed and assessed.

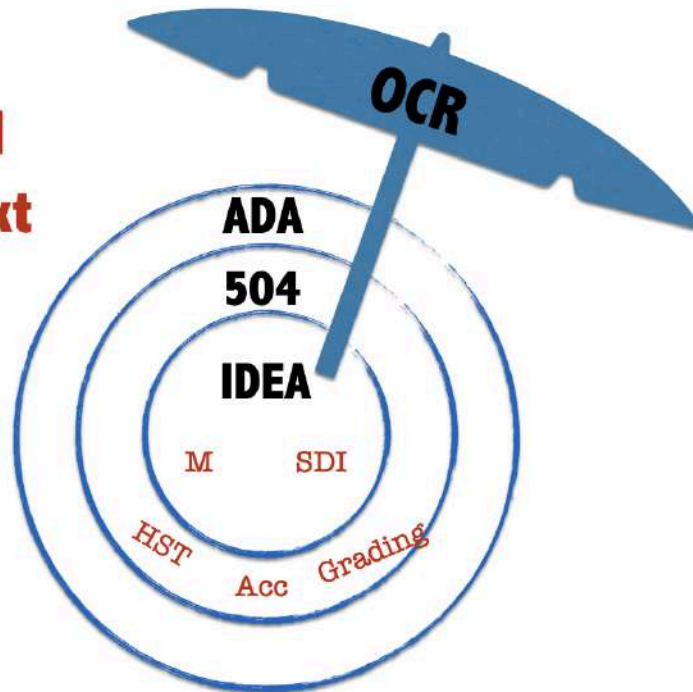
**Accommodations do not change what information is learned or measured** but are tools that enable a student to more readily access curricular content and to more easily demonstrate understanding of the content.

**A modification either directly or indirectly alters the curriculum and/or the assessment itself.** Modifications lower the expectations or standards for a particular student as compared to grade level peers.

# Specially Designed Instruction in Context



## Legal Context



See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/319946261>

# Big Ideas in Special Education: Specially Designed Instruction, High-Leverage Practices, Explicit Instruction, and Intensive Instruction

Article in *Teaching Exceptional Children* · September 2017

DOI: 10.1177/0040059917724412

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# Big Ideas in Special Education

Specially Designed  
Instruction, High-Leverage  
Practices, Explicit Instruction,  
and Intensive Instruction

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Paul J. Riccomini, Stephanie Morano, and Charles A. Hughes

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After returning from the Council for Exceptional Children (CEC) conference in Boston, five teachers were sharing information from the sessions they attended. Mrs. James, a special education teacher, attended multiple sessions emphasizing the importance of using “high-leverage practices” (HLPs) to become a more effective teacher. Mr. Franks, a general education teacher, and his co-teacher, Mrs. Fox, a special educator, attended sessions focused on how to intensify instruction for struggling students with disabilities through the use of “explicit instruction” (EI). Finally, Mrs. Arrow, the special education department chair, attended sessions on providing “specially designed instruction” (SDI) for students with disabilities. In addition, all five of the teachers mentioned that “intensive instruction” (II) was a term used in many of their sessions. As they shared information, it became clear to the group that they were unclear about the differences and similarities of these terms. They left their meeting with several important unanswered questions:

- Are HLPs, SDI, EI, and II the same thing?
- How are HLPs related to explicit instruction?
- If HLPs are used, does that mean SDI is being provided?
- Does using HLPs, such as EI, mean I am providing intensive instruction?

It is understandable that misuse of the terms *specially designed instruction*, *high-leverage practices*, *explicit instruction*, and *intensive instruction* has bred confusion among professionals, and this confusion may lead to miscommunication and misunderstandings in the field. Practitioners need support in making sense of this terminology, understanding where the terms overlap and diverge, and how to meaningfully put all four into practice in their classrooms. To address possible confusion, we define, describe, and illustrate SDI, HLPs, EI, and II.

## Specially Designed Instruction

The Education for All Handicapped Children Act of 1975 (Pub. L. 94-142) defined *special education* as “specially designed instruction, at no cost to parents or guardians, to meet the unique needs of a [child with a disability], including classroom instruction, instruction in physical education, home instruction, and instruction in hospitals and institutions.” This definition was retained in the reauthorization of the law as the Individuals With Disabilities Education Act (IDEA, 2006) in 2000 and 2004. Current IDEA regulations define SDI as

adapting, as appropriate to the needs of an eligible child under this part, the content, methodology or delivery of instruction (i) to address the unique needs of the child that result from the child’s disability; and (ii) to ensure access of the child to the general curriculum, so that the child can meet the educational standards within the jurisdiction of the public agency that apply to all children. (34 C.F.R. §300.39[b](3))

In sum, SDI is a broad term that specifies the type of instruction students with disabilities should receive. SDI is created by changing instructional content, methods, or delivery to meet the student’s unique needs as a result of a disability. SDI should support students with disabilities’ access to the general curriculum while meeting the goals and objectives outlined within individualized education programs. Thus, SDI is the product of identifying the goals and objectives of intervention and, by definition, is individualized and will look different for students with different strengths, needs, and abilities (see Yell and Bateman, this issue.) HLPs, EI, and II are all aspects of SDI (see Figure 1).

*Co-teachers Mr. Franks and Mrs. Fox are planning a lesson on word problems for their fourth-grade class. In their class of 24 students, there are eight students with disabilities who have demonstrated*

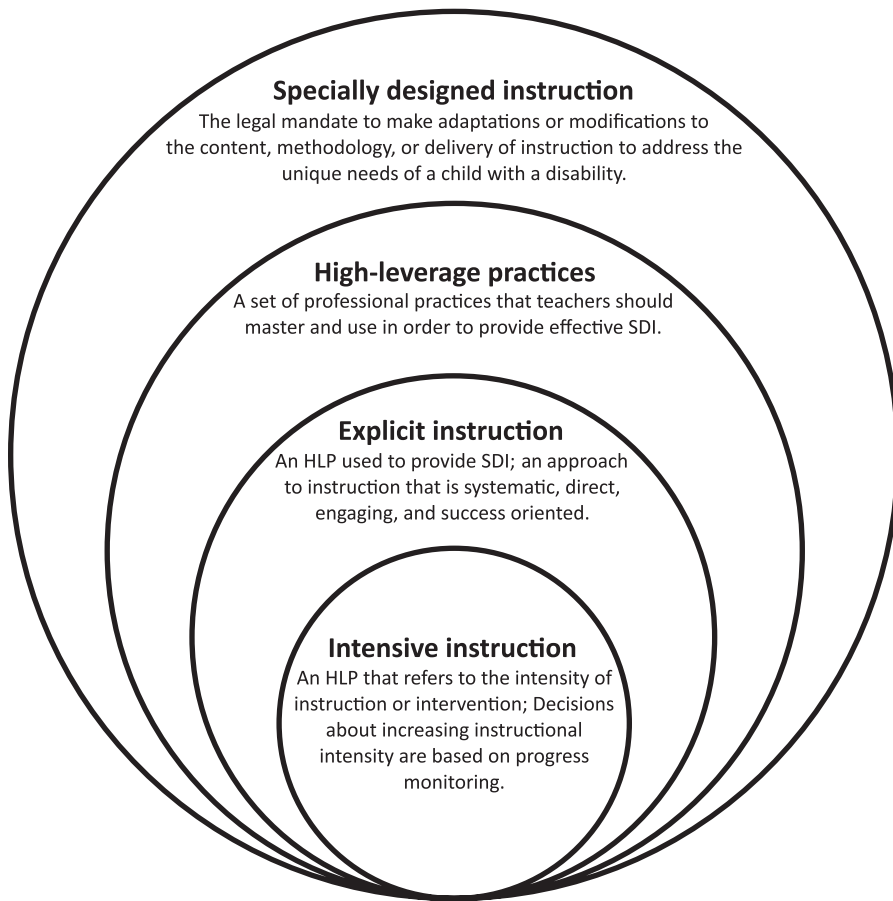
*significant deficits with word problem tasks, even after instruction. Specifically, these students have substantial difficulty identifying what the word problem is asking and determining the correct approach needed to solve the problem. The teachers have often observed the students circling all of the numbers in the word problem and then executing the operation that was most recently used with very little reasoning or explaining. Clearly, the instructional approach used in the curriculum is not facilitating high-level problem solving for these students: They will require SDI to learn how to successfully solve word problems.*

## High-Leverage Practices

Recently, CEC and the Collaboration for Effective Educator, Development, Accountability, and Reform (CEEDAR) Center published a collection of 22 HLPs generated by a team of special education researchers in a book titled *High-Leverage Practices in Special Education* (McLesky et al., 2017). HLPs are “a set of practices that are fundamental to support K–12 student learning, and that can be taught, learned, and implemented by those entering the profession” (Windschitl, Thompson, Braaten, & Stroupe, 2012). The 22 HLPs (see Table 1) published by CEC and the CEEDAR Center are professional practices these organizations recommend be taught in all special education teacher preparation programs.

HLPs address many aspects related to the delivery of special education—collaboration, assessment, social-emotional-behavior supports, and instruction. Criteria for selecting the HLPs specify that each must (a) focus directly on instructional practice, (b) occur with high frequency in teaching in any setting, (c) be research based and known to foster student engagement and learning, (d) be broadly applicable and usable in any content area or approach to teaching, and (e) be fundamental to effective teaching when executed skillfully (McLesky et al., 2017). HLPs can be used as a starting point for selecting,

**Figure 1. Nested structure of special education terms**



a group of research-supported instructional behaviors used to design and deliver instruction that provides needed supports for successful learning through clarity of language and purpose, and reduction of cognitive load. It promotes active student engagement by requiring frequent and varied responses followed by appropriate affirmative and corrective feedback, and assists long-term retention through use of purposeful practice strategies. (Hughes, Morris, Therrien, & Benson, 2017, p. 4)

The EI approach is guided by six principles and 16 elements (see Table 3) that have been derived and distilled from 40-plus years of research focused on effective instruction in general and special education (Archer & Hughes, 2011; Hughes et al., 2017).

EI is taught in many special education teacher preparation programs as a framework for designing and delivering SDI lesson plans because a preponderance of evidence suggests that EI promotes learning more effectively and efficiently than other approaches to instruction (e.g., inquiry- or discovery-based approaches), especially for students experiencing difficulty learning academic skills. In support of this practice, recent reports published by the National Mathematics Advisory Panel (2008) and the Institute for Education Sciences (Gersten et al., 2009; Kamil et al., 2008) used evidence of the effectiveness of EI as a basis to recommend that EI be used in both literacy and mathematics instruction for students with and without disabilities.

designing, and implementing effective SDI. For example, a student identified as having attention and working-memory problems might be a good candidate for needing the HLP of EI (HLP 16) as this approach addresses both of these challenges (Archer & Hughes, 2011; Doabler et al., 2016).

*Mr. Franks and Mrs. Fox discussed the description of scaffolded instruction, an HLP addressed during their last professional development day. They noted the emphasis on providing support, structure, and guidance, and systematically fading support so students are able to complete the task independently. On the basis of their students' observed difficulties, the teachers decided to add a visual cue to the verbal prompting scaffolds they were using to provide the students with a specific structure to follow as they work through the word problem tasks*

*and that would be generalizable to many other problem-solving tasks. The three visual cues would be displayed on the board juxtaposed to each word problem:*

- *What do I know?*
- *What do I need to know?*
- *How do I solve this problem?*

*The teachers planned to use a scaffolded, four-problem progression for this instructional lesson focusing on a common word problem task in fourth grade. See Table 2 for the classroom application.*

**Explicit Instruction**

As noted previously, SDI is a student's individualized program of instruction. EI is an instructional approach that has been identified as an HLP. EI has been defined as

*In order to provide the level of support needed for the students, Mrs. Fox decided to work with the eight students in a small group. The purpose of the small-group instruction was to build the students' understanding of the word problem strategy and their ability to apply the strategy independently. Mrs. Fox modeled the first word problem using the cues (What do I know? What do I need to know? How do I solve this problem?) as*

**Table 1. High-Leverage Practices**

|   |
|---|
| <p><b>Collaboration</b></p> <ol style="list-style-type: none"><li>1. Collaborate with professionals to increase student success.</li><li>2. Organize and facilitate effective meetings with professionals and families.</li><li>3. Collaborate with families to support student learning and secure needed services.</li></ol> <p><b>Assessment</b></p> <ol style="list-style-type: none"><li>4. Use multiple sources of information to develop a comprehensive understanding of a student’s strengths and needs.</li><li>5. Interpret and communicate assessment information with stakeholders to collaboratively design and implement educational programs.</li><li>6. Use student assessment data, analyze instructional practices, and make necessary adjustments that improve student outcomes.</li></ol> <p><b>Social/Emotional/Behavioral</b></p> <ol style="list-style-type: none"><li>7. Establish a consistent, organized, and respectful learning environment.</li><li>8. Provide positive and constructive feedback to guide students’ learning and behavior.</li><li>9. Teach social behaviors.</li><li>10. Conduct functional behavioral assessments to develop individual student behavior support plans.</li></ol> <p><b>Instruction</b></p> <ol style="list-style-type: none"><li>11. Identify and prioritize long- and short-term learning goals.</li><li>12. Systematically design instruction toward specific learning goals.</li><li>13. Adapt curriculum tasks and materials for specific learning goals.</li><li>14. Teach cognitive and metacognitive strategies to support learning and independence.</li><li>15. Provided scaffolded supports.</li><li>16. Use explicit instruction.</li><li>17. Use flexible grouping.</li><li>18. Use strategies to promote active student engagement.</li><li>19. Use assistive and instructional technologies.</li><li>20. Provide intensive instruction.</li><li>21. Teach students to maintain and generalize new learning across time and settings.</li><li>22. Provide positive and constructive feedback to guide students’ learning and behavior.</li></ol> |
|---|

she explained and reasoned through the task. After modeling Problem 1, she had the students partner with a peer to reexplain the think-aloud that was just modeled for Problem 1. Instead of moving to Problem 2, this think-pair-share opportunity served as a guided think-aloud and could help Mrs. Fox determine how much guidance (e.g., provide another teacher model or begin fading) was needed for Problem 2. In Problem 2, Mrs. Fox began to fade her instruction based on the students’ response to Problem 1 by increasing student involvement in performing the strategy. For Problem 2, Mrs. Fox prompted the students through each of the three cues by asking the students to answer each of the questions with their partner and then share their answers with the group. This allowed her to verify her students’ understanding of the strategy. Because the students were successful in using the cues and reasoning through the problem, Mrs.

Fox decided that, for Problem 3, the students would also be responsible for writing the equation and explaining what each number represents to support them in focusing on the problem structure.

To provide additional scaffolding, the answer was included for the first two problems. This allowed the students to focus on reasoning and explaining the problem structure, following the visual cues, and setting up the equation. By providing the answer embedded in the word problems, the teacher hoped to prevent (or at least reduce) the students’ tendency to “grab numbers and do an operation.” As the students showed mastery of setting up the equation, for the third and fourth problems, the answer was not provided. The teacher kept the problem structure similar and changed only the type of object (e.g., trees, shrubs, flowers) and the units (e.g., inches and feet). Using a consistent problem structure helped

facilitate the students’ understanding of the structural features of the problem type (e.g., initial growth, subsequent growth, total growing period, and total growth). Future lessons would introduce different problem structures, which will create the opportunity for mixed practice of different problem structures later in the unit.

Therefore, in Problem 3, the students had their first opportunity to use the strategy in its entirety with minimal prompting. Mrs. Fox prompted the students through the visual cues by asking them what three questions they need to answer before solving the problem. Once the students answered, they were asked to set up and solve the problem individually. When they had finished, Mrs. Fox had the students share their solution with a partner and explain why and how they solved it. She then discussed the solutions and cleared up any misconceptions the students had. Finally, because the

**Table 2. Classroom Application of Scaffolding, a High-Leverage Practice (HLP), for Teaching Word Problems**

| Key questions  | HLP: Scaffolded problem progression   | HLP: Explicit instruction approach   |
|--|---|--|
| What do I know?<br>What do I need to know?<br>How do I solve this problem? | An oak seedling grew 10 feet in the first year. Every year after it grew 1 1/2 feet. After 6 years, the oak tree was 17 1/2 feet tall.                  | <ul style="list-style-type: none"> <li>Teacher models the think-aloud two or three times focusing on the three key questions.</li> <li>Teacher writes the equation for the problem.</li> <li>Teacher explicitly emphasizes the problem structure.</li> <li>Teacher asks questions to check for understanding.</li> </ul> <p>Teacher provides a think-pair-share opportunity for students to reexplain the think-aloud just modeled.</p>  |
| What do I know?<br>What do I need to know?<br>How do I solve this problem? | A garden shrub grew 25 inches in the first year. Every year after it grew 10 1/2 inches. After 4 years, the garden shrub was 56 1/2 inches tall.        | <ul style="list-style-type: none"> <li>Depending on student performance in the first problem, teacher guidance is reduced.</li> <li>Teacher now prompts the students to answer each of the three questions.</li> <li>Teacher discusses the three questions with the group to verify understanding.</li> <li>Students are given a think-pair-share opportunity to explain the problem and write the equation.</li> </ul> <p>Teacher provides support to individual students as necessary.</p>   |
| What do I know?<br>What do I need to know?<br>How do I solve this problem? | A flower grew 8 inches in the first month. Every week after it grew 1 1/2 inches. How tall was the flower after 3 weeks?                                | <ul style="list-style-type: none"> <li>A question is now introduced back into the problem task.</li> <li>Teacher only prompts the students to answer the three questions.</li> <li>Students are given 2 to 3 minutes to read the problem and answer questions.</li> <li>Students then write and discuss the equation with a partner.</li> <li>Students solve problem.</li> <li>Teacher discusses the students' equation and solution to verify students have completed the task.</li> </ul> <p>Teacher monitors students and provides prompts and support as needed.</p> |
|  | A farmer planted an oak seedling. It grew 10 inches in the first year. Every year after, it grew 1 3/4 inches. How tall was the oak tree after 9 years? | <p>Teacher asks students to read problem independently and then asks the students to think about the three key questions they must answer.</p> <p>Students complete task independently.</p> <p>Teacher monitors and provides support as needed.</p>  |

students had demonstrated their ability to use the strategy with minimal prompting, Mrs. Fox removed the three visual cues altogether and asked the students to solve the next problem independently.

Mrs. Fox asked the students to rate their confidence after each problem, which helped determine who might need more II. At the completion of the lesson, students solved two additional problems as an assessment to provide

more information related to individual student performance on this specific task. This information was used by the teachers to determine if this scaffolded, small-group instruction was effective or if more II was needed.

### Intensive Instruction

II, also an HLP (McKlesky et al., 2017), is a process by which the intensity of an intervention is increased to match

the severity of student need or lack of expected or adequate academic or behavioral progress. The concept of II becomes especially important when a student has not progressed even after the use of supplemental, research-supported interventions. These students are typically referred for special education services, where it should be possible to provide the level of intensity needed. When and how to increase instructional intensity are



**Table 3. Principles and Elements of Effective Explicit Instruction**

|   |
|---|
| <p><b>Principles</b></p> <ol style="list-style-type: none"><li>1. Optimize engaged time or time on task.<br/>The more time students are actively participating in instructional activities, the more they learn.</li><li>2. Promote high levels of success.<br/>The more successful (i.e., correct or accurate) students are when they engage in an academic task, the more they achieve.</li><li>3. Increase content coverage.<br/>The more academic content covered effectively and efficiently, the greater potential for student learning.</li><li>4. Have students spend more time in instructional groups.<br/>The more time students participate in teacher-led, skill-level groups versus one-to-one teaching or seatwork activities, the more instruction they receive, and the more they learn.</li><li>5. Scaffold instruction.<br/>Providing support, structure, and guidance during instruction promotes academic success, and systematic fading of this support encourages students to become more independent learners.</li><li>6. Address different forms of knowledge.<br/>The ability to strategically use academic skills and knowledge often requires students to know different sorts of information at differing levels: the declarative level (<i>what</i> something is, factual information), the procedural level (<i>how</i> something is done or performed), and the conditional level (<i>when and where</i> to use the skill).</li></ol> <p><b>Elements</b></p> <ol style="list-style-type: none"><li>1. Focus instruction on critical content.</li><li>2. Sequence skills logically.</li><li>3. Break down complex skills and strategies into smaller instructional units.</li><li>4. Design organized and focused lessons.</li><li>5. Begin lessons with a clear statement of the lesson’s goals and your expectations.</li><li>6. Review prior skills and knowledge before beginning instruction.</li><li>7. Provide step-by-step demonstrations.</li><li>8. Use clear and concise language.</li><li>9. Provide an adequate range of examples and non-examples.</li><li>10. Provide guided and supported practice.</li><li>11. Require frequent responses.</li><li>12. Monitor student performance closely.</li><li>13. Provide immediate affirmative and corrective feedback.</li><li>14. Deliver the lesson at a brisk pace.</li><li>15. Help students organize knowledge.</li><li>16. Provide distributed and cumulative practice.</li></ol> |
|---|

Note. Adapted from *Explicit Instruction: Effective and Efficient Teaching*, by A. L. Archer and C. A. Hughes, pp. 2, 5. Copyright 2010 by Guilford Press.

based on frequent progress-monitoring data that allows for individualized instruction, a key aspect of SDI.

Instruction can be intensified in a number of ways. In their article, “The Taxonomy of Intervention Intensity,” Fuchs, Fuchs, and Malone (this issue) presented a taxonomy of intervention intensity and identify a number of

evidence-based dimensions for evaluating and building intensity. For example, one dimension of intensifying instruction, described as “dosage,” includes decreasing the size of the instructional group and increasing the amount of instructional time (i.e., duration and frequency of instructional sessions). Decreasing group size (or

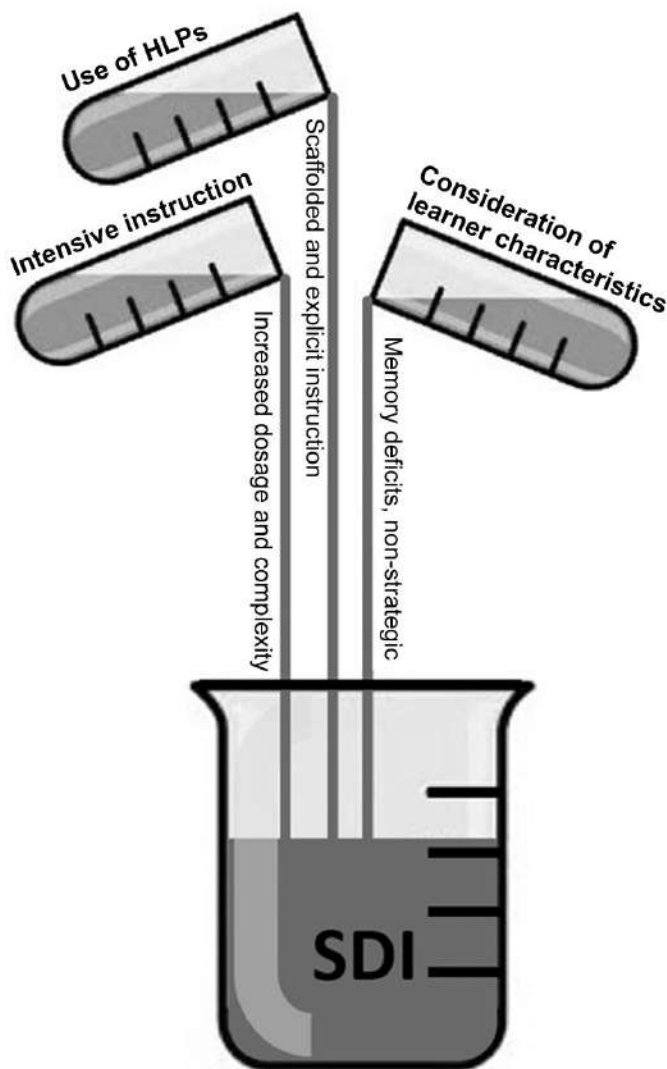
providing one-to-one instruction) and increasing instructional time should result in more opportunities to respond and to receive individual feedback, both shown to improve learning (Hattie & Timperley, 2007). Another dimension of intensity in the taxonomy is “complexity.” Complexity relates to the number of EI elements included in the

instructional program, and II in this domain would involve strengthening or adding EI elements, such as the use of clear, concise, and consistent language when modeling; ensuring students have prerequisite skills; systematic fading of supports contingent upon correct responses; and providing distributed and cumulative review.

*After several small-group sessions using the visual cues, five of the students were able to independently apply the strategy to novel word problems. Three students, however, could not consistently select the appropriate operation; it became apparent these students required more II. Mrs. Fox and Mrs. Arrow, the special education department chair, decided that these three students needed a higher dosage of instruction, so they increased weekly sessions from three to five to provide more opportunities for the students to respond and receive affirmative and corrective feedback. After closer assessment, they also found that students were not fluent (accurate and automatic) in some important preskills. That is, the students did not understand some of the basic operations necessary to accurately answer the questions included in the strategy and required additional instruction in these specific preskills. Together, Mrs. Fox and Arrow identified an effective instructional program that included the full range of the students' preskill deficits and added that to the unit on word problem solving, thus addressing one aspect of the dimension of alignment.*

*Finally, it was decided to address complexity by adding a key element of EI, chunking, in order to reduce cognitive load for students as they continued to learn the strategy. To do this, Mrs. Fox taught one step of the strategy at a time to mastery, versus trying to teach all of them together. When the first step was mastered, the second step was introduced, and so on. In addition to chunking content into smaller units, this process allows for systematic cumulative practice (see Hughes, 2011, for an extended example of how chunking and cumulative practice were blended when teaching a multistep writing strategy).*

**Figure 2. Key ingredients of specially designed instruction used by Mr. Frank and Mrs. Fox**



Note. SDI = specially designed instruction; HLPs = high-leverage practices.

*Overall, the teachers were pleased with the progress demonstrated by the students as a result of the SDI delivered for problem solving. In reviewing their plans, they realized that the key ingredients of SDI for these students was scaffolded instruction, EI, and II (see Figure 2).*

### Summary

The terms described in this article relate to the delivery of instruction for students with disabilities. To begin, the delivery of SDI is dependent upon the identification of a student's unique learning needs.

HLPs serve as foundational aspects related to the delivery of effective instruction. That is, these are features of instruction that should be present across the majority of instruction delivered to students with disabilities, no matter the place. Once instruction begins, data should inform teachers' decisions to change instruction (i.e., adjust features of instructional intensity, incorporate different HLPs) as needed to meet the students' unique needs. Table 4 is a list of organizations that provide additional professional development information related to each of these components of SDI.

**Table 4. Resources for the Delivery of Specially Designed Instruction**

| Organization                              | URL   |
|---|---|
| CEEDAR Center                             | <a href="https://cedar.education.ufl.edu/">https://cedar.education.ufl.edu/</a>           |
| Explicit Instruction                      | <a href="http://explicitinstruction.org/">http://explicitinstruction.org/</a>             |
| National Center on Intensive Intervention | <a href="http://www.intensiveintervention.org/">http://www.intensiveintervention.org/</a> |
| The IRIS Center                           | <a href="https://iris.peabody.vanderbilt.edu/">https://iris.peabody.vanderbilt.edu/</a>   |
| IDEA Data Center                          | <a href="https://ideadata.org/">https://ideadata.org/</a>                                 |

**References**

- Archer, A. L., & Hughes, C. A. (2011). *Explicit instruction: Effective and efficient teaching*. New York, NY: Guilford Press.
- Doabler, C. T., Clarke, B., Stoolmiller, M., Kosty, D. B., Fien, H., Smolkowski, K., & Baker, S. K. (2016). Explicit instructional interactions exploring the black box of a Tier 2 mathematics intervention. *Remedial and Special Education*. Advance online publication. doi:10.1177/0741932516654219
- Education for All Handicapped Children Act of 1975, Pub. L. 94-142, 89 Stat. 773, codified at 20 U.S.C. § 1400.
- Ellis, E. S., Worthington, L. A., & Larkin, M. J. (1994). *Executive summary of research synthesis on effective teaching principles and the design of quality tools for educators* (Tech. Rep. No. 6). Eugene: University of Oregon, National Center to Improve the Tools of Educators.
- Gersten, R., Chard, D. J., Jayanthi, M., Baker, S. K., Morphy, P., & Flojo, J. (2009). Mathematics instruction for students with learning disabilities: A meta-analysis of instructional components. *Review of Educational Research*, 79, 1202–1242. doi:10.3102/0034654309334431
- Hattie, J. A. C., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77, 81–112. doi:10.3102/003465430298487
- Hughes, C. A. (2011). Effective design and delivery of task-specific learning strategy instruction for students with learning disabilities. *Focus on Exceptional Children*, 44(2), 1–16.
- Hughes, C. A., Morris, J. A., Therrien, W. J., & Benson, S. K. (2017). Explicit instruction: Historical and contemporary contexts. *Learning Disabilities Research & Practice*, 32, 140–148. doi:10.1111/ldrp.12142
- Individuals With Disabilities Education Act, 20 U.S.C. §§ 1400 *et seq.* (2006 & Supp. V. 2011)
- Individuals With Disabilities Education Act regulations, 34 C.F.R. § 300 (2012).
- Kamil, M. L., Borman, G. D., Dole, J., Krai, C. C., Salinger, T., & Torgesen, J. (2008). *Improving adolescent literacy: Effective classroom and intervention practices. A practice guide* (NCEE No. 2008–4027). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc>
- McLeskey, J., Barringer, M.-D., Billingsly, B., Brownell, M., Jackson, D., Kennedy, M., . . . Ziegler, D. (2017). *High-leverage practices in special education*. Arlington, VA: Council for Exceptional Children & CEEDAR Center.
- National Mathematics Advisory Panel. (2008). *Foundations of success: The final report of the National Mathematics Advisory Panel*. Washington, DC: U.S. Department of Education.
- Windschitl, M., Thompson, J., Braaten, M., & Stroupe, D. (2012). Proposing a core set of instructional practices and tools for teachers of science. *Science Education*, 96, 878–903. doi:10.1002/sce.21027
- Paul J. Riccomini**, Associate Professor, Department of Counseling, Educational Psychology and Special Education, Pennsylvania State University, University Park; **Stephanie Morano**, Assistant Professor, Department of Curriculum, Instruction, and Special Education, University of Virginia, Charlottesville; and **Charles A. Hughes**, Professor, Department of Counseling, Educational Psychology and Special Education, Pennsylvania State University, University Park, PA
- Address correspondence concerning this article to Paul J. Riccomini, PhD, Pennsylvania State University, 214 CEDAR, University Park, PA 16802 (e-mail: pjr146@psu.edu).*
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## EXPLICIT INSTRUCTION

### Overview

Explicit instruction is a critical high-leverage practice because many researchers and practitioners understand its essential role in delivering high quality instruction across the grade levels and content areas to students with and without disabilities. Core elements of explicit instruction (see guide below) are present throughout many other HLPs, and should be present in every teacher's daily instructional repertoire.

Based on the HLP resources (*High-Leverage Practices in Special Education: The Final Report of the HLP Writing Team* and *High-Leverage Practices in the Inclusive Classroom*) and the information shared at the workshop on March 8, 2019, by Dr. Michael Kennedy the following is a checklist to guide school leaders as they address key elements that comprise effective collaboration.

### Notes



# KEY PRINCIPLES AND ELEMENTS OF EXPLICIT INSTRUCTION

## Specific Statements & Components Within Explicit Lessons

1. Use clear and concise language, especially important when introducing new concepts
2. Provide clear goal statement & rationale to students
3. Use clear signals to get student attention to begin lessons
4. Use clear signals throughout lessons to signal beginning of new components
5. Review prior knowledge and skills
6. Break instruction into manageable steps appropriate for the audience
7. Provide students multiple opportunities to respond throughout the lesson. Promote a high-level of success by tailoring OTRs for students' level, including oral, gestural, action-based, etc.
8. Provide immediate affirmative and corrective feedback
9. Use a range of examples and non-examples
10. Model new skills and practices
11. Provide guided practice
12. Provide independent practice

## Organizational Components of Explicit Lessons

13. Use instructional groups
14. Use a logical sequence within lessons — easy content first, prerequisite skills in place before tackling complex content
15. Focus instruction on critical content
16. Use a brisk pace and limit down time
17. Address different forms of knowledge (declarative/factual, procedural/how, conditional/when & where)

## Notes

## KEY PRINCIPLES AND ELEMENTS OF EXPLICIT INSTRUCTION (cont.)

### *Questions to Consider When Observing an Explicit Lesson*

Was the language used during the lesson free of jargon and other complex terms/concepts that students may not be familiar with?

Were assumptions made about students' prior knowledge and familiarity with content being taught? Or did the teacher explicitly and systematically review key content?

Did the teacher provide any modeling?

Depending on pacing, was one or more of the three elements of the "I do, we do, you do" sequence used?

How many, and what types of opportunities to respond were provided? Was a range of strategies used to elicit student responses?

How many and what types of feedback statements were provided to students? Was feedback immediate following responses?

Was down time kept to a minimum and engaged time maximized?

### Notes

# HIGH-LEVERAGE PRACTICES IMPLEMENTATION GUIDE

## Additional Resources

### Journal Articles (available in the cohort library)

"Big ideas in special education: Specially designed instruction, high-leverage practices, explicit instruction, and intensive instruction," by P.J. Riccomini, S. Morano, and C.A. Hughes, *TEACHING Exceptional Children*, vol. 50.1

"Effective instructional design and delivery for teaching task-specific learning strategies to students with learning disabilities," by C.A. Hughes, *Focus on Exceptional Children*, vol. 44.2

"Explicit instruction: Historical and contemporary contexts," by C.A. Hughes, J.R. Morris, W.J. Therrien and S.K. Benson, *Learning Disabilities and Research Practice*, vol. 32.3

"Using explicit and systematic instruction to support working memory," by J.L. M. Smith, L. Sáez, and C.T. Doabler, *TEACHING Exceptional Children*, vol. 48.6

### Web Resources

[ExplicitInstruction.org](http://ExplicitInstruction.org)

[HighLeveragePractices.org](http://HighLeveragePractices.org)

[IntensiveIntervention.org](http://IntensiveIntervention.org)

[Video: High-Leverage Practice #16: Use Explicit Instruction](#)

[Video: Introduction to Evidence-Based Vocabulary Instruction](#)

[Video: Teaching Vocabulary Terms Using Explicit Instruction](#)

### Video Clips to Analyze and Discuss

[First-grade reading lesson](#)

[Second-grade subtraction lesson](#)

[Fourth-grade mathematics lesson](#)

[High-school geometry lesson](#)

## Recommended References

### Books

[Explicit Instruction: Effective and Efficient Teaching](#), by A.L. Archer & C.A. Hughes.

## Notes



# High-Leverage Practices in Special Education



## Notes



# High-Leverage Practices in Special Education