

# FORWARD TOGETHER


A School Leader's Guide  
to Creating Inclusive  
Schools



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# TABLE OF CONTENTS

ACKNOWLEDGMENTS . . . . .	3
INTRODUCTION . . . . .	6
HOW TO GET STARTED WITH THE SCHOOL LEADER'S GUIDE . . . . .	15
ESTABLISHING COMMON BELIEFS . . . . .	18
 <b>CRITICAL MINDSETS</b> . . . . .	19
 <b>COLLABORATION</b> . . . . .	32
CREATING AN INCLUSIVE CULTURE . . . . .	46
 <b>CULTURALLY RESPONSIVE TEACHING</b> . . . . .	47
 <b>UNIVERSAL DESIGN FOR LEARNING</b> . . . . .	57
 <b>POSITIVE BEHAVIOR STRATEGIES</b> . . . . .	67
 <b>FLEXIBLE GROUPING</b> . . . . .	80
IMPLEMENTING EFFECTIVE INSTRUCTIONAL PRACTICES . . . . .	89
 <b>EXPLICIT INSTRUCTION</b> . . . . .	90
 <b>EVIDENCE-BASED READING INSTRUCTION</b> . . . . .	100
 <b>EVIDENCE-BASED MATH INSTRUCTION</b> . . . . .	112
 <b>STRATEGY INSTRUCTION</b> . . . . .	125
CONCLUSION: WHERE WE GO FROM HERE . . . . .	138
HELPFUL TERMS . . . . .	142

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[Lindsay Jones](#), President and CEO, NCLD

[Fred Poses](#), CEO, Understood

## Authors

[Lindsay DeHartchuck](#), Senior Director of Special Education, KIPP Texas

[Lindsay Kruse](#), Vice President, Understood

[Meghan Whittaker](#), Director of Policy & Advocacy, NCLD

## Editors

[Deborah Perkins-Gough](#), Consultant

[Allison Brooks](#), Copy Editor, Understood

## Designer

[Isabella Rieke](#)

## Project Manager

[Julia Matthews](#), Founder and Consultant, JM Collaborative

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# CONTRIBUTORS

**David Allsopp, Ph.D.**, Professor of Special Education and Teacher Education, College of Education, University of South Florida

**Daniel Ansari, Ph.D.**, Department of Psychology and Faculty of Education, Brain and Mind Institute, University of Western Ontario

**George Batsche, Ed.D.**, Professor of School Psychology, Director Emeritus, Institute for School Reform, College of Education, University of South Florida

**Toni Barton, J.D., M.Ed.**, Dean of Special Education Leadership Programs, Relay Graduate School of Education

**Robert Cunningham, Ed.M.**, Executive Director, Learning Development, Understood

**Donald Deshler, Ph.D.**, Emeritus Williamson Family Distinguished Professor of Special Education, University of Kansas

**Margie Gillis, Ed.D.**, President and Founder, Literacy How

**Kristen L. Hodnett, M.A.**, Clinical Professor of Special Education, Hunter College

**Nathan Jones, Ph.D.**, Associate Professor of Special Education, Boston University Wheelock College of Education and Human Development

**Devin Kearns, Ph.D.**, Associate Professor, Neag School of Education, University of Connecticut

**Michèle Mazzocco, Ph.D.**, Professor, Institute of Child Development, University of Minnesota

**Tameka L. McGlawn, Ed.D.**, Executive Director, College and Career Academy Support Network, University of California, Berkeley

**Jennifer Osen-Foss, M.A.T.**, Teacher, Cedar Rapids Community Schools

**Allison Posey, M.Ed.**, Curriculum and Design Specialist, CAST

**Claudia Rinaldi, Ph.D.**, Associate Professor and Chair of the Education Program, Lasell University

**Gabrielle Rappolt-Schlichtmann, Ed.D.**, Executive Director and Chief Scientist, EdTogether; Adjunct Lecturer, Harvard Graduate School of Education

**Jerome J. Schultz, Ph.D.**, Clinical Neuropsychologist, Lecturer on Psychology, Department of Psychiatry, Harvard Medical School

**Nicole Patton Terry, Ph.D.**, Olive and Manuel Bordas Professor of Education; Associate Director of the Florida Center for Reading Research, Florida State University

**Marshall Raskind, Ph.D.**, Independent Consultant



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# REVIEWERS

**David Abel, M.A.**, Independent Consultant

**Michelle Accardi, J.D., NBCT**, Director of Policy and Partnerships, National Board for Professional Teaching Standards

**Annie Acosta, M.S.W.**, Director of Fiscal and Family Support Policy, The Arc

**Afrika Afeni Mills, M.Ed.**, Senior Manager of Inclusive and Responsive Educational Practices at BetterLesson

**Kathleen Airhart, Ed.D.**, Program Director, Special Education Outcomes, Council of Chief State School Officers

**Danny Carlson, B.A., B.S.**, Associate Executive Director, Policy and Advocacy, National Association of Elementary School Principals

**Nicole Dooley, J.D.**, Senior Policy Counsel, NAACP Legal Defense and Educational Fund, Inc.

**Anjali Forber-Pratt, Ph.D.**, Assistant Professor, Department of Human and Organizational Development, Vanderbilt University

**Carrie Gillispie, Ed.D.**, Senior Analyst, The Education Trust

**Eric Isselhardt, Ph.D.**, President and Acting CEO, National Network of State Teachers of the Year

**Dia Jackson, Ed.D.**, Senior Researcher, American Institutes for Research

**Amanda Karhuse, M.A.**, Director of Advocacy, National Association of Secondary School Principals

**Amanda Lowe, M.A.**, Senior Public Policy Analyst, National Disability Rights Network

**Anum Malik, M.A.**, K12 Education Program Analyst, The Leadership Conference on Civil and Human Rights

**Denise Marshall, M.S.**, Executive Director, Council of Parent Attorneys and Advocates

**Margaret McLaughlin, Ph.D.**, Professor and Director of the Doctorate of Education, College of Education, University of Maryland

**Gregory Mullenholz, M.Ed.**, Principal, Ashburton Elementary School, Montgomery County (MD) Public Schools

**Jazmyne Owens, M.A.**, Manager, Education and Health Policy, National Urban League

**Sasha Pudelski, B.A.**, Advocacy Director, AASA, The School Superintendents Association

**Lauren Morando Rhim, Ph.D.**, Executive Director and Co-Founder, National Center for Special Education in Charter Schools

**Jacqueline Rodriguez, Ph.D.**, Assistant Vice President, American Association of Colleges for Teacher Education

**Melissa Ruben, M.Ed.**, Teacher, Montgomery County (MD) Public Schools

**Julian Saavedra, M.Ed.**, Teacher, Belmont Academy Charter School

**Megan Sands, M.Ed.**, Assistant Professor of Practice, Relay Graduate School of Education

**J. T. Schiltz, M.Ed.**, Partner, Transcend Education

**Erin G. Stark, M.Ed.**, Director of Student Support, New Visions for Public Schools

**Lisa Thomas, Ed.D.**, Associate Director, Educational Issues, American Federation of Teachers

**Sivan Tuchman, Ph.D.**, Research Analyst, Center on Reinventing Public Education

**Karla E. Vigil, M.A.**, Chief Executive Officer, Equity Institute

**Valerie C. Williams, M.P.M.**, Director of Government Relations and External Affairs, National Association of State Directors of Special Education

**Deborah Ziegler, Ed.D.**, former Director of Public Policy and Advocacy and Professional Standards, Council for Exceptional Children

# INTRODUCTION

# INTRODUCTION



## A TEACHER'S JOURNEY

### Chiara's Story

*(emphasis added; pseudonym used to protect her student and school identity)*

Chiara is an elementary school teacher in Delaware who applied to the Teacher Fellowship program at Understood. She's a hardworking teacher with accomplishments earned over her 10 years of teaching—she graduated at the top of her class, received an award for student teaching, and was recognized as “Teacher of the Year” at two schools. She teaches in a traditional public school district and holds numerous leadership positions (e.g., mentor teacher, math team lead, science council) in her school district and state. Like many of the teachers we heard from in these applications, Chiara struggled to meet the needs of the 1 in 5 students in her class with learning and attention issues (identified specific learning disabilities, diagnosed ADHD, or related disorders—whether identified or not—that impact learning). Let's hear directly from Chiara:

“Between my own personal experience as a student with learning difficulties and my work in the classroom, I now understand the importance of strong professional knowledge and skill when working with diverse learners. Having taught in an inclusive co-teaching setting and now in a general education setting, I have seen the resources and support that are provided in different classrooms. Furthermore, I have been an advocate for the different needs of my learners and continually strive to utilize accommodations and modifications to help support all of my students. **When doing so, however, I still feel like there are times that I fall short.**

“I worked with a student who was believed to have dyslexia. He was not officially diagnosed; however, he had a parent with dyslexia. The parents informed me of their concern in the beginning of the school year and provided me with some tools to use in the classroom. I could tell immediately that the student was incredibly resourceful despite his learning difficulties, and he could excel in the classroom when given the appropriate support. **But I didn't feel like I was adequately prepared to help him be successful in the classroom, and as a school we lacked the resources to help him in the ways needed.**

“I spent a lot of time on my own researching online to try to provide him with the best learning experience possible. The support that my school provided was to give him additional guided reading and phonics instruction in a small group. I strongly feel that if I had more understanding about dyslexia and ways to support this student, he could have found even more success. **As teachers, we are in the classroom for our kids and there is nothing more heartbreaking than being unable to support them in achieving their full potential.**”

As a school leader, you may have heard many stories similar to Chiara's. Or perhaps her story is similar to your own.

This *School Leader's Guide* is designed to help you deepen your understanding of the most effective practices for teaching the 1 in 5 students in the United States with learning and attention issues. Equally important, this guide gives you the knowledge and tools you need to work with teachers in your school, helping them design instruction that supports the 1 in 5—and all students.

## INTRODUCTION

### UNDERSTOOD & NCLD

#### Ready to Act

Like Chiara, we're heartbroken by the idea of a teacher working to cultivate a student's potential, but lacking the knowledge, skills, or support to do so. At NCLD and Understood, we're partnering with school and district leaders, instructional coaches, and teachers to help us better understand and support their challenges in meeting the needs of such students. We're also working to ensure that federal, state, and local policies support effective practices. As part of this effort and our partnership, we set out to unpack and address our education system's systemic failure in meeting the needs of the 1 in 5.

In a study published in the May 2019 report *Forward Together: Helping Educators Unlock the Power of Students Who Learn Differently*, we shared the experiences and insights we learned from teachers—often the most consistent touchpoint for students after their families and caregivers. We rooted these experiences in rigorous research conducted by Lake Research Partners and SRI Education to frame the challenges in evidence, to identify mindsets and practices for effectively serving the 1 in 5 in a general education setting, and to map a way forward.

Our purpose was to find the places where the literature coalesced around key principles that most educators should understand to better support the 1 in 5. This research focused on general education classrooms, where the majority of the 1 in 5 spend most of their time. The *Forward Together* report outlines the actions that everyone can take—classroom teachers, special educators, families and caregivers, school administrators, district or network leaders, state-level leaders, policy makers, and teacher educators.

But reading and sharing the research isn't enough; we need to take steps to move forward together today to cultivate the full power of our most marginalized students. As a school leader, you play a pivotal role in supporting teachers as they work together to improve their practice. That's why NCLD and Understood are proud to provide this *School Leader's Guide to Creating Inclusive Schools* as a starting point for you to take action.

Both organizations are committed to being ongoing partners with you on this journey. NCLD has been a powerful advocate for federal, state, and local policies that provide a pathway to better access, equity, and outcomes for the 1 in 5. Understood provides free, actionable resources for educators and families using our online community at [www.understood.org](http://www.understood.org).



#### CORE IDEA #1

Teachers *can* be successful with the 1 in 5. There is evidence that specific mindsets and practices can improve outcomes—not only for students with learning and attention issues, but for *all* students.

### GETTING STARTED

**We're glad you're here.** Just by reading this, you've shown that you have a commitment to ensuring equitable outcomes for the 15 million children with learning and attention issues in the United States. This work might seem daunting, but the good news is that we know a lot about what works.

The sections within the guide are organized around **three pillars of practice** for creating inclusive schools: establishing common beliefs, creating an inclusive culture, and implementing effective instructional practices. Together, these pillars will help your school build confident and successful learners who can meet challenges and capitalize on opportunities in college and in the workplace. As you read through these, you will also see logical alignment noted to the National Policy Board for Educational Administration's Professional Standards for Education Leaders (where applicable). As a guidance document for the standards states, "When a principal cultivates a school environment where all students feel safe, supported, and included, students with disabilities and other struggling learners thrive."<sup>1</sup>

1: Council of Chief State School Officers & Collaboration for Effective Educator Development, Accountability, and Support Center. (2017). *PSEL 2015 and promoting principal leadership for the success of students with disabilities*. Washington, DC & Gainesville, FL: CCSO and CEDAR Center. p. 1.

## INTRODUCTION

### 1 ESTABLISHING COMMON BELIEFS:



**Critical mindsets** include educators' sense of self-efficacy (their belief in their own ability to teach all students successfully), their positive orientation toward inclusion and personal responsibility for all students, and their confidence that they can improve as professionals and that all students can learn through practice and hard work.



**Collaboration** involves general educators, special educators, specialized instructional support personnel, and paraprofessionals working as a team to review student data, align lesson planning, and, where applicable, collaboratively team teach. Collaboration also occurs between educators and families and caregivers to ensure a coordinated team approach to supporting students' learning and development in the two places where kids spend most of their time: in school and at home.

### 2 CREATING AN INCLUSIVE CULTURE:



**Culturally responsive teaching** recognizes the importance of including students' cultural references in all aspects of learning.<sup>2</sup> It understands, responds to, incorporates, and celebrates students' cultural references, engaging families and caregivers as equal partners.



**Universal Design for Learning** helps teachers design differentiated learning experiences in flexible ways to meet the needs of individual learners.



**Positive behavior strategies** help teachers understand and set expectations for student behavior. By applying these strategies and modeling the behavior they want to see in students, teachers can help students build skills to communicate and manage their emotions and needs.



**Flexible grouping** uses data to frequently rearrange students in the classroom for small-group instruction according to their needs and strengths.

### 3 IMPLEMENTING EFFECTIVE INSTRUCTIONAL PRACTICES:



**Explicit instruction** makes learning processes systematic, overt, and clear.



**Evidence-based content instruction in reading** leverages practices based on explicit, structured, and sequential reading instruction.



**Evidence-based content instruction in math** leverages practices based on explicit, structured, and sequential math instruction.



**Strategy instruction** teaches students cognitive and metacognitive strategies for learning content.



#### Stop and Jot

Which of these pillars of practice resonate with what you currently do in your school?  
Which are you excited to learn more about?

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2: Ladson-Billings, G. (1994). *The dreamkeepers*. San Francisco: Jossey-Bass.

## INTRODUCTION



### CORE IDEA #2

The practices in this *School Leader's Guide* map to **drivers of successful outcomes** that enable students to own their future and transition successfully to life after school. When implemented with fidelity, these practices can improve outcomes for the 1 in 5 and for *all* students.

## WHAT YOU CAN EXPECT

### From the School Leader's Guide

**Our goal is to empower you**, as a school leader, to deepen your own understanding and to build and support your team to meet the needs of the 1 in 5. We want you to know that this work is a journey. We know from our research and conversations with educators across the country that your level of exposure to methods for effectively teaching the 1 in 5—and that of the teachers you support—can be highly variable.

As you look through the guide, you may see a connection between the recommended practices and many of the things your school is already doing. The guide will enable you to confirm that these practices are informed by research, helping you to support teachers and students and to lead and advocate in your profession.

You may also find some recommended practices that your school hasn't yet implemented. The guide gives you the specific tools and resources you and your teachers need to get started and build on your success. You can use this first as a learning and professional development guide for your own growth as a leader. And then, as you build confidence, you can partner with your staff to integrate these practices. As you move forward, don't expect teachers to overhaul their practice from A to Z immediately. Instead, look at your data collaboratively to consider the needs of students. Then invite teachers to choose one to three things they want to focus on improving in their practice for this year—aiming for depth, not breadth. The goal is to work toward effective implementation and fidelity.

### WHAT THE SCHOOL LEADER'S GUIDE IS:

- ✓ A definition of each mindset and practice and examples of how it looks in action
- ✓ An explanation, rooted in research, for why this works with the 1 in 5 and all students
- ✓ Self-assessment tools to help you reflect on how closely your school's current instruction aligns with the practice
- ✓ A set of potential next steps and additional resources for strengthening practice across your whole school

### WHAT THE SCHOOL LEADER'S GUIDE IS NOT:

- ✗ A complete resource for professional learning
- ✗ A complete representation of all the features of high-quality instruction
- ✗ A replacement for data-driven interventions and specialized instruction administered by special educators or related-service providers

This guide has been reviewed by teachers, leaders, practitioners, and researchers who offered insights through many different lenses. Thanks to their input, you'll see intersections between the guide's recommendations and effective practices for diverse communities and identities, including:

- > Bilingual and multilingual English language learners
- > Students with culturally diverse backgrounds, including Black and Latinx communities
- > Migrant communities
- > Low-income communities



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## INTRODUCTION

- > Transition ages (middle school to high school; high school to college and career)
- > Disability communities

We also explicitly call out connections to [diversity, equity, and inclusion](#) (see [Helpful Terms](#)) throughout the guide, which you'll see as specific text boxes. We recognize the historical, racialized, oppressive, often intractable systems that can create barriers to accessing high-quality instruction and inclusion for those students furthest from opportunity. In particular, we recognize that bias often shapes and influences the process by which students are identified as having a disability and can at times lead to overrepresentation of students of color in special education. Changing the system and eliminating bias are essential to student success. Every actor within the school plays an important role. This guide aims to highlight these barriers to help us all to work toward more equitable outcomes and to better support students who have been marginalized and underserved.

Finally, [Understood's resources for educators](#) are highlighted throughout the guide. Understood adds new resources every month and will continue to do so, with improved design and navigation coming in early 2020. In addition to these resources, we also worked with trusted partner organizations to identify high-leverage tools (e.g., interactive learning modules) to support educators' ongoing learning. We refer to these tools throughout the sections of the guide.

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## PUTTING IT IN CONTEXT

### Linking to Federal Support

[You likely have a lot of different initiatives happening in your school.](#) You may be wondering how to fund these new ideas or incorporate them into what's already happening. It's important to think about federal laws and funding, state laws and funding, and other opportunities at the local level that can support the practices and mindsets recommended in the guide. This can help these strategies fit more seamlessly into your school.

Here are some ways that existing laws might support your efforts:

[The Every Student Succeeds Act \(ESSA\)](#) first and foremost requires every school to pay close attention to and set goals for student performance—particularly for certain groups, such as students with disabilities or students of color. This guide can provide concrete ways to improve instructional practice and school climate that will drive improvements for student groups and for schools as a whole. Additionally, the law requires states to identify schools that are underperforming when it comes to student outcomes, and specifically if groups of students—like those with disabilities—are underperforming. It then provides funding to help the school implement evidence-based interventions that will lead to improvement. If your school or district falls within the group of schools and districts that need to make improvements, you can use ideas from this guide as part of your strategy to improve outcomes and use funds from ESSA's Title I to make needed changes.

[ESSA's Title II](#) also provides money to states and districts that can be used for professional development. You can find out whether your district has received a grant under this funding stream and encourage district leaders to provide professional development for school leaders and educators on these evidence-based strategies.

[The Individuals with Disabilities Education Act \(IDEA\)](#) provides funding for more than just special education and related services. In fact, funding under Part B of IDEA can be used to provide professional development, and grants under Part D of IDEA can be used to provide training and support for evidence-based strategies. You can find out how your district and state are using their IDEA funds and see how these evidence-based strategies in your school can be supported through those funding streams.

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## CREATING A SCHOOLWIDE FOUNDATION

### For Equity and Access

[Once you've started this work](#), one of the most important things you can do as a school leader is to champion systemic schoolwide changes that enable all classrooms and students to thrive. The practices shared in this *School Leader's Guide* will be most effective if they are implemented in a school that understands and systematically supports inclusion and equity.

Creating inclusive and equitable schools means building a better understanding of how race, ethnicity, culture, English proficiency, socioeconomic status, ability/disability, sex, gender identity, sexual orientation, trauma, and other factors intersect to impact individual students. With that in mind, we highlight four schoolwide and districtwide programs that provide a strong foundation for meeting

## INTRODUCTION

individual student needs. If your school does not currently implement or support these programs, one critical role you can play is to advocate for and lead their adoption.

**Multi-tier system of supports (MTSS)** is a tiered framework for providing high-quality instruction and interventions that are aligned to student needs. MTSS is informed by progress monitoring to ensure effective decision-making about changes to instruction and behavioral support. Within MTSS are tiers of increasingly intensive supports.

MTSS enables leaders to ensure that the right resources are delivered to the right students to accelerate growth and achievement. MTSS promotes early intervention for students with learning and behavioral challenges, and intervention for students who are at risk for poor outcomes.

- > **Response to intervention (RTI)** is the academic arm of MTSS. RTI is a system for screening, monitoring student learning, and providing evidence-based interventions of varying intensity based on student needs. Each student's progress is monitored so that the intensity, frequency, and type of intervention can be adjusted accordingly. RTI may also be used to help identify students who have learning and attention issues.<sup>3</sup>
- > **Positive behavioral interventions and supports (PBIS)** is the behavioral arm of MTSS. PBIS is a tiered behavioral support framework for implementing a continuum of evidence-based behavior supports across the school. PBIS helps schools select and implement preventive behavior practices. Since PBIS operates along a continuum, it also supports students who require more intensive behavioral supports (e.g., a social skills club, an individualized behavior plan).

**Social-emotional learning (SEL)** develops students' emotional intelligence. Emotions are the rudder that steers the ship of thinking and learning.<sup>4</sup> The **Collaborative for Academic, Social, and Emotional Learning (CASEL)**, an organization dedicated to advancing SEL in schools, identifies a framework of five competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. A critical outcome of SEL is that students are able to take ownership of their learning. For the 1 in 5, specifically, the skills of **self-advocacy and self-determination** have been found to lead to improved postsecondary outcomes<sup>5</sup> and higher intrinsic motivation for learning.

Like PBIS, SEL is proactively focused on promoting positive skills and environments rather than punitive or exclusionary discipline. However, SEL focuses more on developing lifelong social and emotional competencies and often involves curricula and instructional programming. **Effective SEL** is highly integrated into instruction, which means that teachers need training (versus traditional models where counselors solely manage SEL). Part of this training is helping teachers and school leaders learn how to model positive social and emotional behaviors in their own interactions with students and colleagues.

Equitable SEL requires educators and school leaders to consider how their local system and expectations may impose cultural norms on students of a variety of cultural backgrounds. Moreover, the most effective social-emotional learning takes into consideration the sociopolitical context in which students are currently living.<sup>6</sup> Often, "all-school" SEL interventions systematically exclude students with learning and attention issues. So teachers need the capacity to implement SEL that supports all students via explicit instruction, while school leaders need to set an overarching tone that creates welcoming learning environments and provides accommodations and modifications to ensure access to the SEL curriculum for all students.

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3: Batsche, G., Elliott, J., Graden, J., et al. (2005). *Response to intervention: Policy considerations and implementation*. Alexandria, VA: National Association of State Directors of Special Education.

4: Immordino-Yang, M. H. (2011). *Embodied brains: How admiration inspires purposeful learning*. (TED talk, November 8, 2011); Immordino-Yang, M. H. (2015). *Emotions, learning, and the brain: Exploring the educational implications of affective neuroscience (1st edition)*. New York, NY: W. W. Norton & Company.

5: Parsi, A., Whittaker, M., & Jones, L. E. (2018). *Agents of their own success: Self-advocacy skills and self-determination for students with disabilities in the era of personalized learning*. Washington, DC: National Center for Learning Disabilities.

6: Simmons, D. (2019). *Why we can't afford whitewashed social-emotional learning*. *Education Update*, 61(4).



## INTRODUCTION

### WHEREVER YOU ARE ON THE JOURNEY—

#### Welcome!

If your school and district are already well along on the journey to better serve the 1 in 5, you may have all or most of the foundations described above in place. If that's the case, you may find some of the information in the sections that follow to be familiar, because many of the practices described here are embedded in these foundations. The *School Leader's Guide* may be most valuable to you as a tool to validate your implementation and to learn how you can continue to improve your practice by identifying priority areas that are not yet a focus for your teachers.

If you are coming to this work at the very beginning of the journey and don't yet have districtwide support for these foundational programs, we recommend working in parallel. Don't let the lack of these foundational programs stop you from learning and making progress! You can focus on the practices described in the guide that you believe are most important and accessible for your specific school—while also advocating for and implementing the more systemic foundations of MTSS, RTI, PBIS, and SEL.



#### CORE IDEA #3

As a school leader, you play a critical role in fostering the environment for inclusion and high expectations. No matter where you are in the journey toward this vision, there are steps you can take now and in the future to ensure that all students can thrive.

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# HOW TO GET STARTED WITH THE SCHOOL LEADER'S GUIDE

By choosing to dive in, you're reinforcing your commitment to creating a school where every student is fully included and given the access and opportunities they need to unlock the full power of their talents. Here's how you can get started in using the guide to make schoolwide change.

## HOW TO GET STARTED WITH THE SCHOOL LEADER'S GUIDE

### GETTING STARTED

#### Actions for School Leaders

- **Read for your own understanding.** First, read through the guide and complete the prompts for reflection and action planning in each section to deepen your own knowledge and confidence.
- **Engage with the guide in your leadership team meetings.** Complete a self-reflection on your level of proficiency with each practice as well as how teachers are currently implementing these practices.
- **Prioritize one practice to focus on as a leadership team and school.** (We recommend looking at behavior and academic achievement data broken down by demographics and disaggregated by and across different subgroups, starting with ESSA subgroups—e.g., race, ethnicity, English proficiency, socioeconomic status, disability status, etc.—to drive decision-making, as well as soliciting [student and caregiver](#) input on students' learning needs and preferences.) Based on your analysis of the data, design and facilitate professional learning opportunities for staff. Provide ongoing support and coaching to teachers on this practice.
- **Leverage tools and excerpts from this guide at an all-staff meeting.** Use it to promote self-reflection among your teaching staff, and support goal-setting around adopting these practices. Suggested approaches:
  - Deep dive into one priority section (in one or multiple meetings):
    - › Read the vignette and prompt teachers to reflect on their own experiences. (What is effective about this teacher's practice? How does that connect to our priorities and practice? What resonates?)
    - › Use the "What It Is" and "Why It's Important" sections to provide formal language for the practice.
    - › Pull from the "What It Looks Like" and "Additional Resources" sections and your own classroom videos and artifacts to engage your staff in naming exemplars of the practice in action. Have staff work together to identify the practices, modify existing tools/rubrics to incorporate these practices, etc.
    - › Practice, practice, practice. Be clear on what you want to see in classrooms as a result. Break this down into bite-size, actionable practice in your meeting.
    - › Incorporate the guide into walkthroughs and coaching. Name clearly what you and coaches will be looking for to support teachers in implementation. Incorporate these goals into your lesson plan reviews, observations, and coaching.
  - Create a learning sequence over the year with the goal of action planning around priorities for the following year:
    - › Dive into one section per month with the goal of understanding the practices deeply.
    - › In each section, have staff do a dive into related data to identify key needs and opportunities as well as reflect on where and how the practices integrate into current priorities and practices.
- **Begin with one grade level, subject, or group of priority students.** If this work is newer to you and your school, start small with a smaller group of educators to test. Try these practices where they are needed the most.

As a school leader, one of the most important roles you can play is ensuring consistency of student experience across the school from classroom to classroom and grade to grade. As you identify a priority group of students or a grade level, don't just look at challenges. Identify strategies that worked well in the previous year for the students you're focusing on. Commit to ensuring that these strategies and/or techniques are present this year across all their classrooms.

- **Discuss this guide with your special educator and/or related-service provider colleagues.** Combine the expertise and experience of both general and special educators to enhance the effectiveness of these strategies.
- **Review this guide with your district leaders and/or regional superintendents** to advocate for district support of critical policies, allocation of professional development investments, consideration of the practices in curriculum decisions, and structures that enable further collaboration.

Depending on where you are in your journey, you might also distribute leadership for change throughout your school. You can provide teacher leaders in your school with the following list of things they can do to engage their colleagues with the guide's recommendations.

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## HOW TO GET STARTED WITH THE SCHOOL LEADER'S GUIDE

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### GETTING STARTED

#### Actions for Teachers

- **Introduce this guide to your existing grade or subject team meetings.** Complete a self-reflection on where you and your colleagues are currently implementing these practices, where you could use more support, and where there might be gaps. Prioritize one practice to start with. Map out the recommended resources and steps over several meetings.
- Using the self-reflection tools in the guide, **identify an area you'd like your school leader to support.** Set an observable goal and create a professional learning cycle with your school leader and/or instructional coach to determine how well you're implementing the practice. Assess progress and plan for future growth.
- **Discuss the guide with your special educator and/or related-service provider colleagues (including school counselors and psychologists).** Combine the expertise and experience of both general and special educators to enhance the effectiveness of these strategies. Leverage the resources in the "Collaboration" section to make these meetings purposeful and help your team synthesize multiple strategies in service of student achievement.
- Take the strategies and resources you're using to better support the 1 in 5, and **advocate for change.** Advocate with school leadership to implement these practices across the school more broadly—and show how they're helping all students.

# ESTABLISHING COMMON BELIEFS


 CRITICAL MINDSETS

 COLLABORATION

The goal of this guide is to help you create an inclusive culture within which to implement strong instructional practices that help all students, including the 1 in 5, to thrive. But to ensure lasting success, this culture must be rooted in common beliefs among the adults within the school community. Our students succeed when educators believe in their own ability to grow and be effective, and when that belief transfers to students. Specifically, instructional practices will be more effective when rooted in these common beliefs:

- › Every student deserves to be held to (and can meet) high expectations.
- › All students belong.
- › Everyone in the school shares a collective responsibility to ensure that students succeed.

School leaders play the essential role of screening for, developing, and upholding these common beliefs across the school. Within the following sections, you'll see how two key areas of common belief provide a critical foundation for the other practices and magnify their impact:

 Critical Mindsets

 Collaboration





## ESTABLISHING COMMON BELIEFS: CRITICAL MINDSETS

### CONVERSATIONS & COMMITMENTS TO CHANGING MINDSETS

#### A Teacher's Perspective

"When I came back from summer break and heard my principal announce an inclusion initiative for the upcoming school year, I was really hesitant and nervous. I had been teaching for several years already and had one exposure to inclusion where I worked with a co-teacher. It wasn't a good experience; we constantly struggled to design and deliver instruction together.

"Now, I was going to be co-teaching with several different teachers. But what helped me change my views on inclusion were my school leaders. There was a clear vision and urgency around why it was important. Our entire community, from teachers to parents to leadership, was invested in making this a success for all students. And we spent a great deal of time learning how to make inclusion effective with different structures and instructional strategies.

"When you have students in specialized populations, the extra investment at the beginning can feel like more work. But inclusion is about reframing the learning teachers will have in the classroom so they're looking at this from an asset-based mindset. They're all 'our' students—not 'mine' or 'yours.' With evidence-based strategies, we can enhance our practice to meet the needs of all learners."

—Denise Panaglian, Understood Teacher Fellow

#### A Leader's Perspective

*Gabriella Charter Schools, in Los Angeles, have a unique vision. And not just because Gabriella began as an outgrowth of a successful afterschool dance program for low-income youth. The staff at Gabriella is deeply committed to inclusion and has transformed the way educators and staff meet all students' needs.*

"Our leadership team saw a critical need to better support our students with learning and attention issues. We saw the high value of inclusion and once we made that decision, we worked together to bring our teachers on board, both in their mindsets and in their practices.

"Our teachers spend a significant amount of their collaborative time looking at data to analyze their effectiveness. It's a big conversation—how are our students with learning and attention issues performing compared to peers? We have invested resources in providing teachers with the tools and skills needed to be successful.

"When teachers know they have the skills to be successful with all students, their confidence and self-efficacy increase. We have a lot of teacher buy-in when it comes to the power of inclusive settings, but it took investment and commitment from our leadership team to reach these outcomes."

—Catherine Rees-Mayer, Director of Special Education, Gabriella Charter School

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"Teachers will embrace change if they have the skills and support to do it. It's the responsibility of schools and districts to give teachers the tools and skills to shift their beliefs."

George M. Batsche, Ed.D., professor and director emeritus of the  
Institute for School Reform at the University of South Florida

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"If you don't work on the soil in which you are planting the seeds, the seeds will not grow in the way they are intended to."

Robyn Ince, National Urban League



## ESTABLISHING COMMON BELIEFS: CRITICAL MINDSETS

### WHAT IT IS

#### Defining Critical Mindsets

**Mindsets include your thoughts, beliefs, and expectations—the lenses through which you perceive the world.** These lenses affect how you live and work and the choices you make every day. They develop over a lifetime through exposure to direct and indirect messages all around you—messages from your family, your friends, and your community and through media, news, and other external influences.

Our identities impact our mindsets. Our life experiences, values, assumptions, and identity influence the way we see the world around us. It's important that school leaders and teachers have the opportunity to self-reflect to gain a deeper understanding of how their own identities affect their attitudes and teaching practices. With this understanding, educators can develop the characteristics needed to effectively teach students with different cultural identities.

Mindsets can have positive or negative influences on your perceptions and expectations of those around you (or yourself!). The good news is that mindsets are changeable. But that change requires self-reflection and awareness combined with intentional focus and support.

It's also important to recognize that mindset can be influenced by our own **implicit biases**—the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious way. Implicit biases are activated involuntarily, often without our awareness or intentional control. These implicit associations can influence our attitudes and feelings about other people based on characteristics such as race, ethnicity, age, socioeconomic status, ability, and appearance. Implicit biases may not even align with our conscious or declared beliefs, but they do influence our actions (and reactions). Because these biases are often hidden or unrealized, it can be hard to see how they may be influencing our actions and affecting outcomes for our students and school. As we discuss the key teacher and leader mindsets that help support the 1 in 5 in this section, you will see connections and references for how implicit bias and other influences impact these critical mindsets.

What educator mindsets are *critical* for supporting students with learning and attention issues? Are these mindsets innate, or can you build them in yourself and in your teachers? We're going to explore three critical mindsets (and corresponding core values for highly effective schools) that lay the foundation for students with learning and attention issues—and all students—to learn best:

- > Strong sense of self-efficacy
- > Positive orientation toward inclusion and personal responsibility for all students
- > Growth mindset (orientation toward growth and personal development)

### WHY IT'S IMPORTANT

#### How Educators' Mindsets Support the 1 in 5 and All Students

**We know that student mindsets matter.** A sense of efficacy, an attitude of personal responsibility, and a growth mindset enable students to develop the resilience and persistence to become independent and successful learners. However, your mindset as a school leader and the mindsets of your teachers are equally important for ensuring positive student outcomes.

Reflecting on and shifting your own mindset can feel uncomfortable—even intimidating at times. Still, taking the first step or building small, intentional reflections into your practice can go a long way. It takes a lifetime to build a mindset. So it takes intentionality and a supportive environment to build a new one.

Developing these mindsets in schools is especially urgent and beneficial for the 1 in 5 because it can reduce the stigma that's often associated with learning and attention issues. Currently, students with such issues:

- > Are three times more likely to drop out than their peers
- > Enroll in college at half the rate of their peers
- > Are involved in the justice system at a rate of 1 in 2

Research has shown that the presence of stigma is likely to adversely affect educational expectations and student academic outcomes among the 1 in 5, over and above the influence of specific academic deficits for the population as a whole. In schools, students with learning and attention issues can be subject to all five elements of stigma influenced by other students and by educators: labeling,





## ESTABLISHING COMMON BELIEFS: CRITICAL MINDSETS

stereotyping, separation, loss of status, and discrimination.<sup>7</sup> In addition to peer influence, educators' assumptions and biases can impact student expectations and outcomes, contributing to these elements of stigma. When combined with other factors such as socialization (the systemic training of the norms of our culture), the impact of stigma on those perceived to be "outside the norm" can be compounded.

As a school leader, you've likely observed that some teachers already come to school with the critical mindsets needed to combat this stigma, but others may not. You have a crucial role in helping your team understand and develop these mindsets. For instance, you can consider mindsets during hiring, build teachers' skills and capacity, and set the tone for the culture of the school to positively reflect important mindsets.



### CORE IDEA #1

The fostering and support of these critical teacher mindsets for the 1 in 5 typically serve as the foundation upon which the other practices within this guide thrive.

## WHAT IT LOOKS LIKE

### Critical Mindsets in Action

The table below shows some ways that the three critical mindsets look in classrooms that support the 1 in 5. You can use this information to deepen your own understanding and to promote effective practices in the teachers you support. You can also share the figure with teachers to help them reflect on how each of these mindsets impacts their practice and their students' success.

When learning and attention issues intersect with other often-marginalized identities like race, ethnicity, socioeconomic status, or sexual orientation, the effects of implicit bias may be magnified. Civil rights advocates observe that students with disabilities who are also low-income or Black/Hispanic/non-white often face compounded bias and low expectations. While the research on these intersections is still growing, the table below shows possible compound effects on students who have these multiple identity factors.

### TEACHER MINDSET:

**Strong sense of self-efficacy**  
*Teachers' belief in their own ability to teach all students successfully (including those who struggle)*

### WHY IT'S IMPORTANT

Teacher self-efficacy is linked to increased student growth and achievement.<sup>8</sup>

Teachers with a strong sense of self-efficacy tend to have a more positive orientation toward inclusion and feel ownership and responsibility for providing the conditions and instruction to allow all students to achieve (because they feel confident in their own ability to teach and manage students).

With self-efficacy, teachers' decision-making is less likely to be influenced by non-academic factors (e.g., socioeconomic status or student behavior) when placing students in groups. Teachers are less likely to refer students who struggle or act out for special education when those students are not exhibiting other indicators of learning and attention issues.

If shown how to effectively observe students and use differentiated instructional strategies, teachers can support struggling students.

### WHAT IT LOOKS LIKE

The teacher is likely to create opportunities for students to experience success (e.g., using scaffolding, giving students multiple ways to show what they know, or demonstrating what success on a task looks like and helping students build toward their own achievement).

7: Daley, S. G., & Rappolt-Schlichtmann, G. (2018). [Stigma consciousness among adolescents with learning disabilities: Considering individual experiences of being stereotyped](#). *Learning Disabilities Quarterly*, 41(4), 200–212; Crosnoe, R., Rieggle-Crumb, C., & Muller, C. (2007). [Gender, self-perception, and academic problems in high school](#). *Social Problems*, 54(1), 118–138; Shifrer, D. (2013). [Stigma of a label: Educational expectations for high school students labeled with learning disabilities](#). *Journal of Health and Social Behavior*, 54(4), 462–480.

8: Shaughnessy, M. (2004). An interview with Anita Woolfolk: The educational psychology of teacher efficacy. *Educational Psychology Review*, 16(2), 153–176.



## ESTABLISHING COMMON BELIEFS: CRITICAL MINDSETS

The teacher spends time with struggling students and is likely to motivate students who have low interest in school. The teacher is also less likely to criticize students when they make errors.

The teacher is open to new ideas and willing to try new instructional methods.

### HOW IMPLICIT BIAS CAN HAVE COMPOUND EFFECTS (IDENTITY INTERSECTIONS)

Teachers who teach students from low-SES backgrounds and/or teach at schools with high student turnover and high student absenteeism report lower self-efficacy.<sup>9</sup> Given that teachers may feel less effective or confident when teaching these students, they may be likely to lower expectations, blame the family, or feel helpless to improve. This can have more impact if a teacher within this context also does not yet feel effective teaching students with learning and attention issues.

#### TEACHER MINDSET:

##### Positive orientation toward inclusion

Teachers' belief that inclusion benefits all students (not just students with learning and attention issues), combined with the willingness to take personal responsibility for all students.

#### WHY IT'S IMPORTANT

Student belonging is an important prerequisite for student engagement, motivation, and achievement, as well as persistence. It also impacts students' perceived value in school. With a positive orientation to inclusion, teachers are more likely to believe the 1 in 5 can succeed.<sup>10</sup>

#### WHAT IT LOOKS LIKE

The teacher differentiates instruction, leveraging UDL planning and instructional delivery practices that provide access to the curriculum for all students (i.e., adapts teaching methods for different learners).

The teacher views disabilities as developmental challenges that can be supported, and clearly believes that students can reach success.

The teacher puts in place classroom norms and practices that intentionally build a classroom environment in which all students feel welcome. The teacher creates a classroom environment and culture where the 1 in 5 and all students develop a feeling of belonging.

### HOW IMPLICIT BIAS CAN HAVE COMPOUND EFFECTS (IDENTITY INTERSECTIONS)

Teachers may feel that students with learning and attention issues "just need to be able to keep up" in the general education class, instead of seeing scaffolding and differentiated instruction as critical tools for access and learning.

Teachers can sometimes err on the side of pity, not wanting to push students too hard because they feel sympathy instead of empathy.<sup>11</sup> But research shows that maintaining high expectations is a key enabler of achieving high student outcomes.

#### TEACHER MINDSET:

##### Growth mindset

Teachers' beliefs that they can improve as teaching professionals and that all students can learn through practice and hard work.

As the literature in social-emotional learning (SEL) suggests, this moves beyond beliefs about the nature of intelligence to educators' understanding of how persistence, hard work, self-regulation, and effort relate to learning and other outcomes at school or work.

#### WHY IT'S IMPORTANT

Teachers' own growth mindset is necessary for them to be able to develop and adapt practice to meet the needs of individual learners.

Teachers implementing a growth mindset are able to balance high expectations with demonstrating understanding of the very real challenges and circumstances their students face.

When integrated with culturally responsive teaching, which includes student culture and language and experience in all learning, teachers' growth mindset can help create students' growth mindset.

When integrated with social-emotional learning, growth mindset reinforces student agency and self-determination.

#### WHAT IT LOOKS LIKE

The teacher understands the paradox that learning and attention issues are brain-based conditions that children do not "grow out of," but that with the right supports and strategies, students can develop skills and strategies and be as successful as their peers.

9: Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117–148.

10: Cullen, J. P., Gregory, J. L., & Noto, L. A. (2010). The Teacher Attitudes Toward Inclusion Scale (TATIS): Technical report. Paper presented at the annual meeting of the Eastern Educational Research Association, February 11, 2010.

11: Rattan, A., Good, C., & Dweck, C. S. (2012). "It's OK: Not everyone can be good at math": Instructors with an entity theory comfort (and demotivate) students. *Journal of Experimental Social Psychology*, 48(3), 731–737.



## ESTABLISHING COMMON BELIEFS: CRITICAL MINDSETS

The teacher is more likely to explicitly teach students how to become strategic learners, and less likely to use low-engagement (e.g., stand and deliver) teaching strategies.

The teacher evaluates students based on their rate of growth, not the discrepancy between their performance and their grade level.

The teacher understands how students develop socially, cognitively, and emotionally over time and how to support students in these changes.

### HOW IMPLICIT BIAS CAN HAVE COMPOUND EFFECTS (IDENTITY INTERSECTIONS)

Implicit biases around race, ethnicity, culture, socioeconomic status, ability/disability, sexual orientation, etc., may influence the perception of ability even if an educator generally has a growth mindset. Lower expectations can lead to low student confidence and resilience.<sup>12</sup>



### CORE IDEA #2

There is an interconnection between teachers' experience, their sense of self-efficacy to improve student achievement, and their belief in the abilities of 1 in 5 learners.

**The more experience teachers have with the 1 in 5—or, more importantly, the more they achieve success with students and as a result, believe in their own ability to be effective—the stronger their mindsets toward inclusion.**

## WHAT YOU MIGHT BE THINKING

### Common Questions and Challenges in Supporting Critical Mindsets

Depending on your situation, building a school in which all adults hold these mindsets may seem challenging—but it can be done. You can begin by modeling these mindsets consistently. Look across your adult school culture for ways to live, reward, and reinforce them. Below are some of the questions you may receive from your staff or challenges that may resonate with you.

### CHALLENGE OR QUESTION

Some teachers may question whether they can be effective teaching the 1 in 5 because they didn't get a degree in special education.

### INSIGHT AND TIPS FROM THE FIELD

General education teachers don't need special education training to be effective with students with learning and attention issues. Encourage teachers to observe and talk with other general education teachers who are effective with these students.

Ask a special education teacher to observe teachers who doubt their own effectiveness with students with learning and attention issues and to provide feedback on what they're doing well for students with learning and attention issues.

Encourage teachers to speak with students about things they do that help the students in class.

12: Yeager, D. S., & Dweck, C. S. (2012). [Mindsets that promote resilience: When students believe that personal characteristics can be developed](#). *Educational Psychologist*, 47(4), 302–314.



## ESTABLISHING COMMON BELIEFS: CRITICAL MINDSETS

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Some teachers may feel that if students can't keep up, they shouldn't be in the general education classroom. It will slow things down for everyone else.

Remind teachers that general education classes naturally have students with varying degrees of skill and a broad range of abilities. Teachers already adjust to meet the needs of students. Give examples from the teachers' own practice.

Ask the teachers to look at students' IEPs with the students' special education teachers, who can make specific suggestions for strategies and accommodations that will better support the students.

Consider watching the [TED Talk by Todd Rose](#) about the "myth of average" with teachers to prompt a discussion about neurodiversity in classrooms.

Refer to [research](#) that clearly articulates the benefits of inclusive, diverse classes for *all* students.

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How can I possibly tell whether teachers have these mindsets during the interview process?

Ask questions and/or include performance tasks that might help you quickly assess these mindsets. For example, to measure growth mindset, you might provide real-time feedback to the candidate during a sample lesson to see how willing and able they are to process and incorporate it quickly.

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I didn't get to hire my staff—I have the teachers I have, and they don't all have these mindsets.

Focus on growth toward the mindsets as a goal for your staff. These mindsets are not static. Everyone can grow more fully into them no matter their starting point.

Make the mindsets an explicit part of your professional development (PD) activities, no matter the subject of the PD. Ask presenters to specifically tie the mindsets to their presentations wherever it makes sense.

If all three mindsets feel out of reach to you, begin with the growth mindset, since it opens the space for positive views on inclusion and self-efficacy. If teachers learn to believe that they and each of their students can and will improve their skills through the teacher's effort, it will become easier to see their class as a place for all students. They will also increasingly gain confidence in their own skills at working with students who learn differently.

Identify a group of teachers demonstrating these mindsets and establish this as the norm. Praise teachers who are struggling or reluctant to hold these mindsets when they demonstrate them.

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I don't feel like I fully know how to support teachers in feeling effective supporting the 1 in 5—I'm still learning myself!

Be open to learning together with your teachers. Ask them questions related to the mindsets in their work. Provide them with examples of your own questions about the mindsets.

Ask teachers to share with you specific successes in working with students who learn differently, instead of just talking about what seems problematic.

Continue learning yourself—and share your own aha moments with your teachers.



## ESTABLISHING COMMON BELIEFS: CRITICAL MINDSETS



### CORE IDEA #3

Mindsets can be impacted by our own experiences of success and fear of failure. When working on your mindsets or those of your team, assume the best. Create the space to celebrate progress, build confidence, and encourage what's working.



### Stop and Jot

What do you perceive as the biggest barrier to changing mindsets in your school?  
What role can you play in overcoming it? Who can work with you on this?

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## RELATED PSEL 2015 STANDARD(S)<sup>13</sup> For the Success of Students With Disabilities

### Standard 1: Mission, Vision, and Core Values

*How effective principals meet the standard for the support of students with disabilities:*

- > Work collaboratively to develop a mission and vision for their school that supports the success of all students, including students with disabilities.
- > Ensure a shared understanding of and mutual commitment to this mission and vision among faculty, and shape practice accordingly.
- > Include parents and other external stakeholders in the visioning process, and consistently engage them as partners in this work.

### Standard 2: Ethics and Professional Norms

*How effective principals meet the standard for the support of students with disabilities:*

- > Uphold the moral imperative to acknowledge inequities and promote equality.
- > Possess an ethical mindset to identify, interpret, and manage the ethical dilemmas in leadership for students with disabilities, and address these dilemmas by embodying the values of justice and care, equality and equity, and community in service of each student.
- > Lead with interpersonal and social-emotional competence.

### Standard 3: Equity and Cultural Responsiveness

*How effective principals meet the standard for the support of students with disabilities:*

- > Recognize, confront, and educate others about the institutional forces and historical struggles that have impeded equitable educational opportunities for students with disabilities.

13: Council of Chief State School Officers & Collaboration for Effective Educator Development, Accountability, and Support Center. (2017). [PSEL 2015 and promoting principal leadership for the success of students with disabilities](#). Washington, DC & Gainesville, FL: CCSSO and CEEDAR Center.

## ESTABLISHING COMMON BELIEFS: CRITICAL MINDSETS


### Standard 5: Communities of Care and Support

*How effective principals meet the standard for the support of students with disabilities:*

- > Ensure that students with disabilities have opportunities to learn with their non-disabled peers to the greatest extent possible.
- > Promote inclusive social environments that foster acceptance, care, and a sense of value and belonging in adult-student and student-peer relationships.
- > Support teachers as they create productive and inclusive environments in their classrooms and throughout the school.

### ADDITIONAL RESOURCES

 Additional knowledge building

 Self-assessment/implementation support

 Turnkey professional development

 Coaching conversations

 Miscellaneous

#### Course Enhancement Module on Inclusive Education (CEEDAR Center)

Compilation of resources for providing PD on inclusive education, including:

- > A PowerPoint with speaker notes
- > Links to multimedia (videos and podcasts)
- > Activities for participants
- > Suggested readings

#### Course Enhancement Module on School Leadership for Students with Disabilities (CEEDAR Center)

Compilation of resources for providing PD on school leadership that supports the learning of students with disabilities within effective inclusive schools. The CEM includes:

- > A PowerPoint with speaker notes
- > Links to multimedia (videos and podcasts)
- > Activities for participants
- > Suggested readings

#### Florida Self-Assessment of MTSS Implementation

Self-assessment rubric tool to measure the mindsets and systems that support implementation of MTSS. School leadership teams can use this instrument to:

- > Discuss and reach agreement on their school's level of implementation
- > Formulate action plans

#### SWIFT Education Center

National technical assistance center that supports the development of mindsets necessary for a multi-tier system of supports. Includes print and video resources on topics like:

- > Inclusive instruction
- > Strong and supportive schoolwide culture
- > Trusting family partnerships

### PRIMARY CONTRIBUTOR

**George M. Batsche**, Ed.D., is professor and director emeritus of the Institute for School Reform at the University of South Florida. He is co-director of the Florida Statewide Problem-Solving/Response to Intervention Project for the Florida Department of Education.

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## CRITICAL MINDSETS: INVENTORY FOR ACTION For School Leaders



### Putting It All Together

We've consolidated key practices, steps, and resources to help your school get started on critical mindsets—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice as a school leader, and where you might focus and prioritize your school's next efforts.

#### PRACTICES OF CRITICAL MINDSETS

#### WHY IT'S IMPORTANT

#### POTENTIAL NEXT STEPS

I explore my own implicit biases (e.g., race, ethnicity, socioeconomic status, ability, gender, sexual orientation, language).

*We all have unintentional biases. Knowing what yours are and how they might shape your leadership allows you to model and guide your staff to do the same.*

- ☐ Explore your own [bias](#) through free, validated questions at [Project Implicit](#). (There is a specific bias test for disability.)
- ☐ Explore this *New York Times* series of mini-videos and articles on implicit bias: [Who, Me? Biased?](#)
- ☐ Work with a colleague or friend to reflect on a particular student or incident using the [Mindful Reflection Protocol](#).

I build empathy for the 1 in 5 and other intersectional groups.

*Because not everyone has experience or teacher/leader preparation with the 1 in 5, building empathy and understanding the lived experiences of your students can greatly inform your leadership and school design.*

- ☐ Take the [Toronto Empathy Questionnaire](#) to identify areas of strength and opportunity.
- ☐ Engage with the [Through Your Child's Eyes](#) tool at Understood to learn more about what it feels like to be a student with learning and attention issues.
- ☐ Explore additional [empathy resources](#) to connect with and understand your students.
- ☐ Build your [foundational understanding](#) of learning and attention issues.
- ☐ Consider incorporating [disability awareness lessons](#) into your classroom or school.
- ☐ Join the [Mindset Scholars Network](#), which advances scientific understanding of learning mindsets to improve student outcomes and expand educational opportunity.

I model inclusive language.

*Teachers need a clear vision for inclusionary language.*

- ☐ Use inclusive, positive messaging (e.g., instead of “What is wrong with this student?” say “What do we need to do for this student to be successful?”).
- ☐ Voice that all students are capable of achieving grade-level expectations and that it is our responsibility to find the most effective way to do that.

My school supports teachers in reaching consensus and recognizing the need for change.

*Teachers' mindsets improve when leaders explicitly promote the ideas of self- and collective efficacy.*

- ☐ Establish a common language and shared vision for what it means to effectively educate all students.
- ☐ Collaboratively analyze student achievement data, disciplinary data, school culture survey data, and any other data related to the school's priorities.





## CRITICAL MINDSETS: INVENTORY FOR ACTION For School Leaders (cont.)

### PRACTICES OF CRITICAL MINDSETS

### WHY IT'S IMPORTANT

### POTENTIAL NEXT STEPS

**My school provides the tools and knowledge that teachers need for success.**

*Teachers are also more likely to shift their mindsets when they believe they possess the needed skills to reach all students (self-efficacy) or when they recognize that their school leaders will provide them with the support needed to implement this change.*

*Leaders who design these types of learning experiences can have great success shifting teachers' mindsets and maintaining their buy-in.*

- ☐ Design and facilitate effective professional learning opportunities that include modeling and practice as well as ongoing coaching and feedback. These can provide mastery experiences or opportunities to succeed quickly with few barriers. This can lead to a significant boost in teachers' self-efficacy.
- ☐ Consider creating peer learning communities, or study groups. These can have a powerful effect in positively influencing instructional strategies and student achievement.

**My school has established strategic structures for shared leadership.**

*Teachers thrive when they have protected opportunities for peer collaboration and coaching.*

- ☐ Create a safe, welcoming school environment that promotes teachers' willingness to take risks to improve their practices.
- ☐ Invest in data-driven problem-solving structures. As these changes are happening, all professionals involved need to be collecting and analyzing data and determining what revisions need to occur.
- ☐ Identify, cultivate, and engage teacher leaders in all aspects of schooling (e.g., content-areas, behavior, etc.).

**Mindsets are integrated into the human capital systems in my school.**

*Mindset change requires support, safety, and incentives.*

- ☐ Update your selection process to hire teachers who demonstrate these critical mindsets.
- ☐ Integrate growth models into teacher evaluation systems.
- ☐ Invest in designing and facilitating high-quality professional learning opportunities.
- ☐ Invest in instructional coaching.

**My school communicates with families and caregivers in ways that convey that we believe their children can succeed. We take responsibility for working with them collaboratively to make that happen.**

*Belief and responsibility are the building blocks to strong partnerships with families. If you start here, you create the foundation for more challenging conversations.*

- ☐ Review the language in your school's back-to-school and teacher introduction communications to make sure they explicitly say this. Ensure that these communications are accessible to all families (e.g., make content available in different languages and in multiple formats that meet accessibility standards).
- ☐ Spot-audit IEP and progress report comments to look for consistent messages that convey belief in and high expectations for each student.



## CRITICAL MINDSETS: INVENTORY FOR ACTION For Teachers



### Putting It All Together

We've consolidated key practices, steps, and resources to help you get started on critical mindsets—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice and where you might focus and prioritize your next efforts.

#### PRACTICES OF CRITICAL MINDSETS

**I explore my own implicit biases (e.g., race, ethnicity, socioeconomic status, ability, gender, sexual orientation, language).**

**I reflect on my mindset strengths and opportunities for growth.**

**I build empathy for the 1 in 5 and other intersectional groups.**

**I ask for help when I need it.**

**I have communication routines in place that let families and caregivers know that I believe their children can succeed—and that I will partner with them to make that happen.**

#### POTENTIAL NEXT STEPS

- ☐ Explore your own [bias](#) through free, validated questions at [Project Implicit](#). (There is a specific bias test for disability.)
- ☐ Explore this *New York Times* series of mini-videos and articles on implicit bias: [Who, Me? Biased?](#)
- ☐ Work with a colleague or friend to reflect on a particular student or incident using the [Mindful Reflection Protocol](#).

- ☐ Look through the “What It Looks Like” section for each mindset in this guide and identify your current practice. If you can, ask a colleague or coach to observe you for another perspective. Set a goal to work on.
- ☐ On your own, or with your team or school leader, identify all the ways you currently meet the needs of the 1 in 5. Reflect on why these approaches work. Celebrate these accomplishments with pride as a reminder of what is possible. Put up visual reminders in your room, your planner, or the staff room.

- ☐ Take the [Toronto Empathy Questionnaire](#) to identify areas of strength and opportunity.
- ☐ Engage with the [Through Your Child's Eyes](#) tool at Understood to learn more about what it feels like to be a student with learning and attention issues.
- ☐ Explore additional [empathy resources](#) to connect with and understand your students.
- ☐ Build your [foundational understanding](#) of learning and attention issues.
- ☐ Consider incorporating [disability awareness lessons](#) into your classroom or school.
- ☐ Join the [Mindset Scholars Network](#), which advances scientific understanding of learning mindsets to improve student outcomes and expand educational opportunity.

- ☐ Work closely/advocate with school administrators to provide common planning time for collaboration with special educators, English language support teachers, and other specialists.
- ☐ Work closely with your grade-level teams or your school leader to get coaching support as you work to build your self-efficacy.
- ☐ Leverage the special educators and specialists in the building to build your knowledge and understanding.

- ☐ Review the language in your back-to-school and teacher introduction communications to ensure they explicitly say this.
- ☐ Establish a regular routine to build [positive interactions with families](#).
- ☐ Consider [unspoken barriers](#) that may inhibit engagement of families. Be flexible in your routine to accommodate them.

## CRITICAL MINDSETS: SELF-REFLECTION



### Self-Assessment and Planning for Action

The purpose of this section is to support your reflection and conversation about possible next steps to promote critical mindsets. Use the questions below to reflect on your current practice.

How does current practice in my school align with the descriptions in this section of this guide?

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What mindset will be easiest to embody? What might be most challenging? What can I do to move beyond those real or perceived barriers?

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What is one idea I want to begin implementing that will support critical mindsets? (Although you can't control many factors, focus on the things that are within your locus of control.)

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Which resources presented in this guide will I use, and what professional organizations will I engage with further? (Review "Additional Resources" and "Inventory for Action" to support your next steps.)

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What additional support will I need to implement these strategies? Who in my school or district can support my development?

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## ESTABLISHING COMMON BELIEFS: COLLABORATION

### SPANISH FOR ALL

#### 60 Minutes Set the Stage for Success

**It's Friday afternoon at the end of a long week at school.** Mary (high school special education co-teacher), Sara (Spanish II teacher), Mike (Spanish II teacher), and Janice (instructional coach) filter into Sara's Spanish classroom. Each pulls up a meeting agenda on their laptop, and Janice kicks off promptly at 1 p.m., their lunch period. "Let's start just by reminding each other of our norms."

Mike jumps in and shares, "I'd like to add a sixth one—I noticed last time we met, we were all really distracted and responding to emails while Sara was running through the assignments. I think we should agree and commit to active listening."

The group nods approvingly. After they all agree and commit, Janice dives into the first item on the agenda, a review of what student success will look like in this unit. One goal is that students will use digital media to communicate and work collaboratively. Students are also expected to demonstrate initiative and self-direction.

Once the goals are established, the team discusses where students may struggle in the upcoming blended unit. The group runs through different subsets of students: students with 504 plans, students with IEPs, students receiving intervention services, and so forth. For each group of students, the team discusses the accessibility of the content and materials and makes a plan for applying the principles of Universal Design for Learning to reduce these barriers. The group also makes a note of how they can support students with organizational and time-management needs using strategy instruction. As the meeting concludes, the team reviews next steps as well as responsibilities and deadlines.



"When you have a tight-knit group of educators, fewer students will fall through the cracks. You can improve outcomes through effective collaboration."

*Jennifer Osen-Foss, M.A.T., Instructional Coach at Clear Creek Amana High School*

### WHAT IT IS

#### Defining Collaboration

**The scenario above may sound typical for your school,** or perhaps it feels like a far-off aspiration. As the needs of students continue to diversify, it becomes harder for individual teachers or leaders to be effective when acting alone. No one educator can have specialized knowledge of every variation in learning and thinking, and students rarely interact with only one teacher during the day. This is where collaboration comes in.

Collaboration is a powerful tool you can use to engage general educators, special educators, learning specialists, paraprofessionals, community partners, and students together as one team to meet the needs of students—so no one has to do it alone or know everything.

When collaboration works well, it provides ways to review student data, facilitates integrated lesson planning, and, where applicable, includes collaborative team teaching. But collaboration isn't only essential among educators in the building. It's also critical that you and your teachers foster collaboration



## ESTABLISHING COMMON BELIEFS: COLLABORATION

with families and caregivers. The goal is a coordinated approach that supports children's learning and growth in the two places where they spend most of their time: at home and in school.

As a school leader, you have the power to identify collaboration as a top priority, creating structures and routines that integrate opportunities for collaboration throughout the school community.



### CORE IDEA #1

No one has to do it alone. Students *and* teachers succeed when strong collaboration involves educators, specialists, paraprofessionals, and families.

## WHY IT'S IMPORTANT

### How Collaboration Supports the 1 in 5 and All Students

**While collaboration is effective for all students, it's essential to support the 1 in 5.** Several research studies have found that students with disabilities in schools with a collaborative culture outperform similar students from other schools.<sup>14</sup> That's not surprising, because collaboration:

- › **Leverages the knowledge and skills of different disciplines to support individual student needs and strengths.** For instance, consistent collaboration time can enable general educators to consult with reading specialists about below- and above-grade-level readers to ensure that all students are supported.
- › **Creates shared high expectations.** Collaboration ensures that teachers set the same high expectations for students. When teachers review data together and share information about a student's progress and challenges, they create a sense of common ownership of the student's success. The 1 in 5 can often be underestimated, and a shared accountability for success helps teaching teams provide the differentiation a student may need while holding that student to grade-level standards.
- › **Provides a consistent learning experience.** By aligning approaches, collaboration ensures that students can benefit from consistent methods of learning across classrooms. It also helps ensure that students' accommodations and supports are consistently implemented.
- › **Fosters problem-solving and insights.** Intentional collaboration provides opportunities for teams to share ideas and problem-solve around particular student needs, leading to new insights and perspective on challenges. When general educators, special educators, and related service providers are included in collaboration, different strategies and approaches are brought into the conversation.
- › **Identifies gaps and intervenes earlier.** Proactive collaboration can help improve the outcomes of response to intervention (RTI) by surfacing concerns about students earlier and identifying the right evidence-based interventions to deploy.

**When you extend collaboration to families and caregivers, all students benefit.** Families have rich assets to offer the learning community as partners, and effective collaboration with them enables you to make more meaningful connections between content and students' background knowledge, interests, and culture. For students with learning and attention issues, collaboration also helps facilitate consistency in the implementation of that student's accommodations and supports. And it empowers families to support their children in completing homework or other school assignments at home. All of these factors increase children's engagement and ownership of learning in school.

14: McLeskey, J., Barringer, M-D., Billingsley, B., et al. (2017, January). [High-leverage practices in special education](#). Arlington, VA: Council for Exceptional Children & CEEDAR Center.



## ESTABLISHING COMMON BELIEFS: COLLABORATION



### CORE IDEA #2

Collaboration leverages the different knowledge and skills needed to support individual student needs and strengths across different content areas and different classrooms. This provides a more consistent learning experience for students and can increase achievement for the 1 in 5.

### WHAT IT LOOKS LIKE

#### Collaboration in Action

When Janice started meeting with her Spanish team, they quickly noticed these benefits for students, as well as for their own practice and sense of support at school. Let's return to Janice's Spanish PLC to see collaboration in action. Here's a sample agenda the PLC used:

Spanish Meeting Agenda March 24, 2017				
<b>Materials to Bring:</b>  <b>PLC Members:</b> <b>Goals/Outcomes:</b> <ul style="list-style-type: none"> <li>Wrap up Blended Unit Planning</li> </ul>			<b>Norms</b> <ol style="list-style-type: none"> <li>Meeting once a week for 75 minutes, allowing time for individual prep at the end (always on the Monday/Tuesday of each week)</li> <li>Being efficient with our time- stick to our agenda/to-do list!</li> <li>Remember Sara has Spanish 2 A day and be proactive about helping her be prepared</li> <li>Remember to share home-made resources with Sara</li> <li>Start the agenda for the next meeting at the end of the current meeting</li> <li>Active listening will be practiced</li> </ol>	
Topic for Discussion	Who leads	Estimated Time	Minutes	
Review Norms	Janice	5 minutes	We talked about norms and added a new norm: #6	
<b>Student Needs:</b> <ul style="list-style-type: none"> <li>Overall accessibility of this unit's instruction and materials</li> <li>Students with 504 Plans</li> <li>Students with IEP Plans</li> <li>Students receiving intervention services</li> </ul>	Janice	15 minutes	<ul style="list-style-type: none"> <li>Identified barriers</li> <li>Mary will prepare an initial set of recommendations for applying principles of UDL to instruction and materials; team will review, revise, and finalize next week</li> <li>Mike will prepare an initial set of recommendations for strategy instruction connections; team will review, revise, and finalize next week</li> </ul>	
<b>Finalize grading for the Blended Unit:</b> Where will they fall? <ul style="list-style-type: none"> <li>Communication (participation?)</li> <li>Cultures</li> <li>Connections</li> <li>Communities</li> </ul> Should the mandatory assignments fall under "Tests/Projects"?	Janice	5 minutes	<ul style="list-style-type: none"> <li><b>Communication:</b> <ul style="list-style-type: none"> <li>Mandatory Assignment: Quizzes</li> <li>Options: Participation</li> </ul> </li> <li><b>Cultures:</b> <ul style="list-style-type: none"> <li>Mandatory Assignment: Quizzes</li> <li>Options: Participation</li> </ul> </li> <li><b>Connections:</b> <ul style="list-style-type: none"> <li>Mandatory Assignment: Quizzes</li> <li>Options: Participation</li> </ul> </li> </ul>	
			<ul style="list-style-type: none"> <li><b>Communities:</b> <ul style="list-style-type: none"> <li>Mandatory Assignment: Quizzes</li> <li>Options: Participation</li> </ul> </li> <li><b>Vocab/Grammar practice:</b> Homework</li> </ul>	
<b>Parent Letter:</b> Proofread and sign off	Mike	5 minutes	Proofread and finalized the letter to be emailed to parents. <b>Team can email out to parent lists.</b>	



## ESTABLISHING COMMON BELIEFS: COLLABORATION

<p>Communication Category: Finalize the <b>options</b> in <a href="#">Unit 5 Combined</a>.</p> <ul style="list-style-type: none"> <li>Divvy up assignment design after finalizing.</li> </ul>	Mike	8 minutes	<ul style="list-style-type: none"> <li>Mary will adapt her rubric to meet the needs of the translation assignment. - <b>DONE</b></li> <li>Mike will complete Option #1-- Complete the 2 telehistorias AND then write what you think the follow-up would be. <b>DONE</b></li> <li>Sara will complete Option #2--Storyboard <b>DONE</b></li> </ul> <p>This category will focus on writing. Grammar instruction will need to be incorporated to the lessons</p>
<p>Cultures/Comparison Category: Finalize the <b>options</b> in <a href="#">Unit 5 Combined</a>.</p> <ul style="list-style-type: none"> <li>Divvy up assignment design after finalizing.</li> </ul>	Janice	8 minutes	<ul style="list-style-type: none"> <li>Mary completed the <b>mandatory assignment</b>: - need to add test to Mike's schoology</li> <li>Sara does option #1-el gran desafio with Schoology assignment <b>DONE</b></li> <li>Mike will do Option #2- View the Zac Efron cooking video from Despierta America-<b>DONE</b> <a href="https://www.youtube.com/watch?v=pNu_BqToTDE">https://www.youtube.com/watch?v=pNu_BqToTDE</a></li> </ul> <p>This category will focus on listening.</p>
<p>Connections Category: Finalize the <b>options</b> in <a href="#">Unit 5 Combined</a>.</p> <ul style="list-style-type: none"> <li>Divvy up assignment design after finalizing.</li> </ul>	Mary	8 minutes	<ul style="list-style-type: none"> <li>Sara will complete the <b>mandatory assignment</b>: Reading from the book comparing culinary traditions. <b>DONE</b></li> <li>Mike will complete option #1--Reading about Spain basics, a recipe, a famous person WITH Schoology quiz.- <b>DONE</b></li> <li>Mike will complete option #2--Reading about Spain basics, a recipe, a famous person WITH Schoology quiz.- <b>DONE</b></li> </ul> <p>This category will focus on reading.</p>
<p>Communities Category: Finalize the <b>options</b> in <a href="#">Unit 5 Combined</a>.</p> <ul style="list-style-type: none"> <li>Divvy up assignment design after finalizing.</li> </ul>	Sara	10 minutes	<ul style="list-style-type: none"> <li>Sara will complete the <b>mandatory assignment</b>: Spanish used outside the classroom with a native speaker. Will develop the talking points and rubric. <b>DONE</b></li> <li>Mike will complete option #1A video journal reflecting their enjoyment, enrichment, and advancement of EATING in Spanish-<b>DONE</b></li> <li>Mary will complete option #2--A video restaurant review- <b>DONE</b></li> </ul> <p>This category will focus on speaking.</p>
Set up Schoology Folder in Spanish Resources	Mary	<b>DONE</b>	Thanks!
Build Pacing Calendar	Janice	<b>DONE</b>	

What does this agenda tell us about the factors that make collaboration successful? Consider the following information to deepen your understanding of how successful collaboration works.



## ESTABLISHING COMMON BELIEFS: COLLABORATION

### KEY SUCCESS FACTORS FOR EDUCATOR COLLABORATION

### WHY IT MATTERS

### WHAT IT LOOKS LIKE IN THE SPANISH PLC EXAMPLE

#### Time and purpose:

Commit to regular, thoughtful planning

- Having a regular, intentional routine of collaboration allows teachers to be proactive in student support, anticipate needs, and make sure the plan is prioritized.
- If school leaders believe that collaboration leads to professional growth and increased student outcomes, the group is empowered to succeed. Teams need time and space to meet.

- The team meets once a week for approximately 60 minutes (with additional 15 minutes for prep).

#### Results-oriented:

Focus on student work and data

- Rooting the conversation in student work and data allows the team to be grounded in what students are actually doing and learning, and it removes subjective interpretation.
- Focusing on student work ensures that the team sets measurable goals for growth and progress.

- Preparation resources are linked.
- Student work and profiles are used in anticipating gaps and challenges to preface the planning.

#### Trust:

Use empathy and perspective-taking

- Collaboration is based on respect for other participants' roles, thoughts, and contributions as well as trust in the safety and effectiveness of the shared responsibility.
- Social and emotional skills in the adults (like empathy and perspective-taking) focus the conversation on student learning and needs. Gaps in student learning can feel deeply personal, and collaboration requires the team to create the space to be vulnerable with each other in the best interest of the students.

- Norms are defined and clearly reviewed in every meeting.
- Clear roles ensure that everyone has a voice and team needs are identified.

#### Share responsibility:

Set mutual norms and goals

- Group norms (like starting and ending on time, active listening, and confidentiality) create a respectful and productive team environment.
- The team should agree on mutual goals for their collaboration. Building mutual responsibility with strong facilitation ensures that next steps are honored, resources are shared, and time is well spent.

- Action items are captured and transparent, so that no one person is carrying the follow-up and next steps.



### DIVERSITY, EQUITY, AND INCLUSION CONNECTION

Collaboration with trusted colleagues can help you to identify your own and one another's "blind spots" and assumptions you might be making about student or colleague expectations, ability, or other factors. Collaboration with your students allows them to have a voice in their learning, providing opportunities for students to be empowered and building trusting relationships. In addition, it can help you identify opportunities to leverage their cultural identities for learning (use culture as a strategy to close the achievement gap).

A lot of collaboration is carried out in team meetings, both large and small. You can use the tip sheet yourself and share it with teachers to help them structure successful collaborative meetings.





## ESTABLISHING COMMON BELIEFS: COLLABORATION



### TIP SHEET FOR STRUCTURING TEAM MEETINGS

- ☐ Designate a **team leader** or meeting facilitator, who will synthesize team members' contributions. When the team has trouble reaching agreement, the facilitator helps the group come to a decision.
- ☐ Create a **meeting agenda**. Communicate with team members about any preparation the meeting might require (e.g., administer and analyze a summative assessment). Disseminate that information far enough in advance of the meeting to permit participant preparation.
- ☐ Identify a **timekeeper** to help the team stay on agenda and within time limits.
- ☐ Identify a **notetaker** who will be responsible for documenting the discussion and agreed-upon next steps.
- ☐ After the meeting, the **facilitator** sends notes out to group members and solicits feedback to confirm consensus with the group.



### CORE IDEA #3

Building in routine, structured processes for collaboration actually creates the freedom and space for you and your colleagues to focus on student learning and use your limited time wisely!

## WANT TO TAKE A DEEPER DIVE?

### Spotlight on Integrated Lesson Planning

Now that you've considered the foundations of collaboration, let's see how it works in the context of a specific collaborative practice that fosters effective inclusion: integrated lesson planning. If your school is using MTSS, integrated lesson planning can ensure that there is alignment between general education (Tier 1), intervention (Tier 2), and specially designed instruction or special education (Tier 3). Without this alignment, it's difficult to accelerate the performance of your students who have learning and attention issues. Let's start with a case study illustrating how this practice benefited a student.

*Brian is a sixth grader with significant delays in reading. According to recent evaluation data, his independent reading comprehension level is four years behind that of his peers and he struggles with oral reading fluency. When grade-level material is read aloud to him, he is able to understand the material and answer comprehension questions appropriate for his age and grade. Brian demonstrates avoidance behaviors like being out of his seat, work refusal, requests for health referral, and attendance problems.*

*Brian's support team includes sixth-grade language arts teachers, a reading instructional support teacher, a special education teacher, an ELL support teacher, and the school counselor. The team meets to review Brian's performance and the available assessment data. The language arts teachers (Tier 1) note that four other students share Brian's profile. These students include two ELLs and two additional students who were struggling in reading and already receiving intervention from the reading instructional support teacher. All of the students have a history of work avoidance in language arts as well as social and self-efficacy issues. The support team decides to develop an MTSS instructional plan for all five students.*

*Meeting collaboratively, the language arts teachers identify their learning goals and discuss instructional strategies for the next four weeks. The reading and special education teachers identify instructional strategies and supports that can be used in Tier 1 to support all learners, including the five students who are struggling.*

> **Instructional strategy:** Language arts teachers decide to implement Collaborative Strategic Reading (i.e., evidence-based reading instruction, flexible grouping, and UDL) for all students in sixth grade as a way to teach comprehension strategies. The reading instructional support and ELL support teachers will collaborate and co-teach with the Tier 1 language arts teachers to ensure fidelity of implementation.

> **Student performance:** Brian and other students with reading fluency difficulties will provide verbal responses to comprehension probes, using either speech-to-text, teacher interactive, or other



## ESTABLISHING COMMON BELIEFS: COLLABORATION

strategies involving verbal responding (i.e., UDL).

- > **Access to content:** Brian and other students will use text-to-speech technology to access subject content (i.e., UDL).
- > **Collaboration:** Language arts teachers will provide lesson plans in advance to other team members to align Tier 2 and Tier 3 instruction.

The team agrees to set up times for classroom observations and to meet every two weeks to review student data. As a result, Brian is receiving highly aligned support from everyone on his team.

Integrated lesson planning is designed to align instruction across the tiers of MTSS. It's a great example of how collaboration yields high-impact instruction for all students. The integrated lesson planning is not "another thing" for teachers to do. Rather, it uses the existing time teachers allocate for lesson planning to apply a series of steps that "integrate" all instructional personnel and ensure that instruction in all tiers supports Tier 1 learning goals.

Here's how it works:

### WHO

### WHAT

#### 1 All teachers

General educators, reading specialist, speech-language therapist, school counselor, etc.

Meet to plan [evidence-based instruction](#) that is aligned with grade-level standards.

#### 2 Specialist teachers

Special educator, reading specialist, speech-language therapist, school counselor, etc.

Take instructional plans from step 1 and design specialized instruction. For teachers providing Tier 2, Tier 3, and specially designed instruction, this typically means intensifying what is being taught in the general education classroom by:

- > Providing more time
- > Focusing on a narrower range of objectives, or
- > Providing different instruction, such as explicit instruction or errorless learning

#### 3 All teachers

General educators, reading specialist, speech-language therapist, school counselor, etc.

Specialist teachers communicate plans from step 2 back to the larger team to ensure alignment, then spend time in the general education setting to observe and support Tier 1 instruction.

Integrated lesson planning can improve student outcomes for the 1 in 5. It can represent a systematic change to what is currently being done, though, so if you want to implement it at your school, it's OK to focus on one step at a time. Even small changes will have a positive effect on student outcomes!

### Most Important: Families and Caregivers Are the First Teachers

While you might be thinking about collaboration within the school walls, a critical place to focus on is [collaboration with families and caregivers](#). When you build a strong relationship between school and home based on frequent communication and mutual trust, students are likely to experience positive education outcomes in a supportive environment. As you consider how to collaborate with families, you may also wish to read about how to [collaborate with families from different cultures](#) or native languages for additional ideas.

It's important that both you and the teachers in your school understand families' previous experiences with school—both from their own Pre-K–12 experience and from their experience with their children's



## ESTABLISHING COMMON BELIEFS: COLLABORATION

schooling. Inclusion can be a new concept to some families. They may need additional support to understand its potential benefits.

Collaboration with families and caregivers **can be challenging, but it is also rewarding**—and it's a necessary step for supporting the 1 in 5 and all learners. We have outlined some action steps you can share with your teachers to help them establish a spirit of collaboration right from the beginning.



### FOR TEACHERS: GETTING STARTED WITH FAMILY/CAREGIVER COLLABORATION

- ☐ Begin with positive interactions at the beginning of the school year. Get to know your students and families; aim to touch base with every family within the first two weeks of school.
- ☐ Ask families what form of communication they prefer (e.g., phone call, email) and then follow through on their preference.
- ☐ Get to know families through **surveys** about their children. Inquire about their hopes and dreams for the school year and how they would like to be involved in the classroom community, as well as what has worked for their child in the past. Be sure to refer to this survey throughout the year, not just at the beginning.
- ☐ Continue some form of interaction with families two times a month at a minimum, providing tools to use at home, sharing what your class has been learning, or sharing good news and progress.
- ☐ Make sure that communication is two-way. Invite feedback from families about their experiences and their child's experiences in the school and classroom.
- ☐ Invite families as partners into the learning space whenever possible—not just as chaperones or to help with fundraisers. Ask about their ideas and potential contributions.
- ☐ Make sure that all communication/surveys are available for parents and families in their native language if they do not speak English, and in forms that meet accessibility guidelines.
- ☐ If there's a need to communicate about a sticky situation, you can leverage these positive relationships. When it's time to address these situations, communicate clearly with "I" statements and work toward a solution together.
- ☐ Identify allies in your building. Who has a positive relationship with a student's family? Ask them for tips for communicating with the family, and involve them if a sticky situation arises.

## WHAT YOU MIGHT BE THINKING

### Common Questions and Challenges in Implementing Collaboration

**If collaboration were easy, it would be happening seamlessly across every school!** There are real challenges and barriers in implementing strong collaboration practices, but it can be done. Start small if you need to, and build each week, month, and school year. Here are some common questions and challenges you and your teachers may have as you consider collaboration.

#### CHALLENGE OR QUESTION

**There's no time in our schedule.**

**Our general educators and special educators are siloed.**

#### INSIGHT AND TIPS FROM THE FIELD

Leverage existing PLC and/or PD structures within the school.  
See suggestions below in "Additional Resources" for other ideas.  
Look at a tool like [Abl](#), which analyzes equity in scheduling.

Suggest that teachers find one colleague willing to try lesson planning meetings and/or student review meetings.

In PD sessions and meetings, pair teachers for activities and discussions in ways that set the tone for how teachers with different specialties can work together.



## ESTABLISHING COMMON BELIEFS: COLLABORATION

**Our school doesn't have a culture of sharing; teachers often feel like they're going it alone.**

Start with one grade-level or subject matter team (or even just a pair of teachers) who are open to sharing. Have them set up the structure you'd like to replicate and "pilot" this structure. At a future staff meeting, have them share out the process and benefits for students and themselves.

Start with staff meetings (or other existing structures) and design ways for teachers to start sharing in "think-pair-share" protocols.

Look for ways to adjust your school's schedule to make it easy for teachers to collaborate both by naming explicit collaboration times and by ensuring that teachers who would benefit from collaborating with one another are scheduled for the same collaboration periods.

Encourage each teacher to find just one colleague willing to share resources and ideas with them. As teachers gain momentum and results, support them in sharing these out to model and inspire others.

Expect teachers to follow the golden rule: Share resources and materials with others first before asking them to reciprocate.

**Not all teachers hold the same expectations for students with learning and attention issues.**

Begin with foundational training and empathy-building exercises (see examples in the Critical Mindsets: Inventory for Action).

Start with a small team of aligned teachers willing to meet before or after school to collaborate in developing shared expectations for one or more students. Once you see results, use them to make the case for structural changes in the following year.



### Stop and Jot

What do you perceive as the biggest barrier to collaboration in your school?  
What role can you play in overcoming it? Who can work with you on this?

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## ESTABLISHING COMMON BELIEFS: COLLABORATION

### RELATED PSEL 2015 STANDARD(S)<sup>15</sup> For the Success of Students With Disabilities

#### Standard 7: Professional Community for Teachers and Staff

*How effective principals meet the standard for the support of students with disabilities:*

- > Encourage teachers to set high expectations for and engage in active self-assessment and reflective learning in order to promote mutual accountability.
- > Maintain a just and democratic workplace that gives teachers the confidence to exercise responsible discretion and be open to criticism.
- > Promote collaborative cultures focused on shared responsibility for achieving the mission and vision of the school, and for the success of students with disabilities.
- > Communicate clear expectations for collaboration within and among established teams of teachers without micromanaging, and encourage experimentation among teams.
- > Manage tensions and conflict while developing conditions for productivity, including effective professional development, practice, and support to staff.

#### Standard 8: Meaningful Engagement of Families and Community

*How effective principals meet the standard for the support of students with disabilities:*

- > Create partnerships with families of students with disabilities and engage them purposefully and productively in the learning and development of their children in and out of school.
- > Engage families to provide insight about their children's specific disabilities that allows teachers to better understand their needs, make educationally sound instructional decisions, and assist in interpreting and assessing student progress.

### ADDITIONAL RESOURCES



Additional knowledge building



Self-assessment/ implementation support



Turnkey professional development



Coaching conversations



Miscellaneous



#### Communication Skills Checklist (Council for Exceptional Children)

One-page checklist to help individuals identify their communication strengths and needs. Both leaders and teachers can use it to reflect on their communication skills, which are important components of successful teaming.



#### High-Level Practices in Special Education: Collaboration (Council for Exceptional Children)

Downloadable 15-page chapter from the CEC's larger publication. Provides research syntheses for special education teachers on:

- > Collaborating with other professionals
- > Organizing and facilitating effective meetings with professionals and families
- > Collaborating with families



#### Collaborating With Families (IRIS Center)

Learning module designed to help teachers build positive relationships with families of students with learning issues. Multimedia resources and templates cover such topics as:

- > Recognizing that all families are different
- > Understanding the emotions exhibited by the parents of children with disabilities
- > Showing respect to parents
- > Treating parents as equal partners
- > Providing parents with meaningful information about their child's and the school's performance



#### 4 Versions of Family-School Partnerships

A checklist from *Beyond the Bake Sale: The Essential Guide to Family-School Partnerships*. Helps educators assess whether their school is a "Partnership," "Open-Door," "Come-If-We-Call-You," or "Fortress" school.



#### Through Your Child's Eyes tool (Understood.org)

Videos of students, simulations, and explanations from experts that allow educators and families to better understand the perspectives of students with learning or attention issues. Helps teachers build empathy, understand their students, and create expectations to better collaborate with them.

15: Council of Chief State School Officers & Collaboration for Effective Educator Development, Accountability, and Support Center. (2017). [PSEL 2015 and promoting principal leadership for the success of students with disabilities](#). Washington, DC & Gainesville, FL: CCSSO and CEEDAR Center.



## ESTABLISHING COMMON BELIEFS: COLLABORATION

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### PRIMARY CONTRIBUTORS

**Jennifer Osen-Foss**, M.A.T., is an instructional coach at Clear Creek Amana High School.

**George M. Batsche**, Ed.D., is professor and director emeritus of the Institute for School Reform at the University of South Florida. He is co-director of the Florida Statewide Problem-Solving/Response to Intervention Project for the Florida Department of Education.

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## COLLABORATION: INVENTORY FOR ACTION For School Leaders



### Putting It All Together

We've consolidated key practices, steps, and resources to help your school get started on collaboration—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice as a school leader, and where you might focus and prioritize your school's next efforts.

#### PRACTICES OF COLLABORATION

**My school has a culture that prioritizes and reinforces collaboration.**

**My school has structures in place to promote collaboration.**

**My school has methods for engaging with families and caregivers.**

#### POTENTIAL NEXT STEPS

- ☐ Implement teacher selection and hiring tests for experience with and openness to collaboration.
- ☐ Emphasize the importance of collaboration during staff onboarding.

- ☐ Lengthen the regular school day and shorten one day per week to create blocks of collaboration time.
- ☐ Schedule regular (e.g., weekly/monthly) early dismissal or late-start days.
- ☐ Use paraprofessionals and/or substitute teachers to provide class coverage to release teachers during the school day.
- ☐ Schedule common planning times for grade-level and/or content-area teachers.
- ☐ Schedule special subjects into blocks to create collaboration time.
- ☐ Ensure that an adequate amount of time exists for comprehensive professional learning (e.g., formal PD and/or job-embedded) as well as coaching/technical assistance.
- ☐ Create communication systems so that professional learning meetings do not have to be used for “housekeeping” items (e.g., announcements).
- ☐ Implement integrated lesson planning.
- ☐ Schedule regular meetings specifically for analyzing student data.

- ☐ [Create a welcoming school environment](#)—greet families in their language, provide translators, and provide transportation to school events.
- ☐ Make a [personal connection](#) with families and learn about their culture, language, successes, and challenges.
- ☐ Ensure clear communication by [translating all communications](#).
- ☐ Make the [enrollment process manageable](#) and [accessible](#).
- ☐ Identify [ways](#) to invite parents to engage at school.
- ☐ Understand and communicate [your legal rights and responsibility](#) to educate all children.



## COLLABORATION: INVENTORY FOR ACTION

### For Teachers



#### Putting It All Together

We've consolidated key practices, steps, and resources to help you get started on collaboration—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice as a teacher, and where you might focus and prioritize your school's next efforts.

#### PRACTICES OF COLLABORATION

I have a consistent schedule for collaborating with my grade-level or content-area team members, special education teacher(s), and related-service providers.

I have consistent communication structures with team members.

I have group norms established for collaborative meetings.

I have consistent structures for school-to-home communication.

#### POTENTIAL NEXT STEPS

- ☐ Schedule a weekly time to meet—and stick to it.
- ☐ Establish group norms.
- ☐ Create a meeting agenda.
- ☐ Implement integrated lesson planning.
- ☐ Schedule regular meetings specifically for analyzing student data.

- ☐ Create a team meeting agenda for notetaking.
- ☐ Establish a weekly time to identify and communicate schedule conflicts.

- ☐ Establish group norms.
- ☐ Establish individual roles (e.g., facilitator, timekeeper, etc.).

- ☐ Identify families' and caregivers' [preferences for communication](#).
- ☐ Schedule a weekly time to communicate with families and caregivers.
- ☐ Use effective [communication strategies \(e.g., emails\)](#) with families and caregivers.





## COLLABORATION: SELF-REFLECTION



### Self-Assessment and Planning for Action

The purpose of this section is to support your reflection and conversation about possible next steps for collaboration. Use the questions below to reflect on your current practice.

How do my school's current collaboration practices align to the descriptions in this section of this guide?

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What strategies do I want to begin implementing to improve collaboration in my school?

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Which resources presented in this guide will I use, and what professional organizations will I engage with further? (Review "Additional Resources" and "Inventory for Action" to support your next steps.)

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What additional support will I need to implement these strategies? Who in my school or district can support my development?

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# CREATING AN INCLUSIVE CULTURE

🔗 CULTURALLY RESPONSIVE TEACHING

🌐 UNIVERSAL DESIGN FOR LEARNING

⊕ POSITIVE BEHAVIOR STRATEGIES

👥 FLEXIBLE GROUPING

IDEA requires all students to be educated within the [least restrictive environment](#) to the maximum extent possible. This means that students with disabilities should spend as much time as possible in the general education classroom with appropriate supports and services. As a school leader, your commitment to all students requires that you build an inclusive culture within your school that goes far beyond compliance with this minimum legal requirement.<sup>16</sup> In other words, the IDEA's least restrictive environment mandate should be the floor, not the ceiling.

We know that when educators are given the right skills to ensure that all students thrive together in the classroom, we are living up to our full promise of equal access and opportunity for all students. Building an inclusive culture means that we seek first to meet our students with compassionate curiosity, working always to understand and then support student behavior. This section is designed to help you explore four additional approaches that create an inclusive culture:

- 🔗 Creating a culturally responsive environment throughout your school and classrooms
- 🌐 Helping teachers design and implement lessons that provide multiple means of engagement, representation, and expression
- ⊕ Supporting and teaching positive student behaviors
- 👥 Leveraging flexible grouping to give students the instruction they need, when they need it

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<sup>16</sup>: Council of Chief State School Officers. (2017). *PSEL 2015 and promoting principal leadership for the success of students with disabilities*. Washington, DC: Council of Chief State School Officers.



## CREATING AN INCLUSIVE CULTURE: CULTURALLY RESPONSIVE TEACHING

### IF YOU BUILD FOR BELONGING

#### Students Can Thrive

Mr. Green teaches in a school district with a high proportion of English language learners, due to its proximity to the agriculture industry and a large settlement of Guatemalan refugees. When you walk into Mr. Green's classroom, you're first struck by the high level of student engagement. Students are seen deep in collaborative conversations. Mr. Green allows students to speak or write in their native language. He then supports them in making connections to the same high-level lesson in English by providing sentence starters and peer editing, pairing up students with different levels of English proficiency.

Mr. Green's classroom library is full of texts that reflect his students' backgrounds. His anchor charts use both English and the students' native language to increase comprehension. Similarly, when Mr. Green teaches using a PowerPoint, he provides translations to students as well. Mr. Green collaborates with the SPED and ESL teacher weekly. The ESL teacher supports the content Mr. Green is teaching through vocabulary instruction and oral language practice before each unit of study.

Mr. Green designed this classroom experience intentionally. Because he's from a different culture than that of most of his students, he knows that he needs to take extra measures to understand their needs. He administers student interest surveys to his students and engages with their families and caregivers. He reflects often about the students' experiences in their communities. He engages with students before and after school and during class to build close relationships and understand how to teach them more effectively based on their culture, language, and experiences. He uses students' backgrounds and assets to enhance his teaching. These practices have led to increased student engagement and learning.



“Culturally relevant pedagogy is your responsibility as a teacher; it's a key tool for building an inclusive classroom. It sends the message to students that you value and honor them and see their experiences as an asset.”

*Claudia Rinaldi, Ph.D., Associate Professor and Chair of the Education Program at Lasell College*

### WHAT IT IS

#### Defining Culturally Responsive Teaching

Gloria Ladson-Billings originated the concept of culturally responsive teaching (CRT) two decades ago as a way to integrate students' cultural references and knowledge in the classroom.<sup>17</sup> Since then, the power of CRT to activate students' learning has been demonstrated in classrooms and schools throughout the country. Geneva Gay defines culturally responsive teaching (CRT) as:

*“The behavioral expressions of knowledge, beliefs, and values that recognize the importance of racial and cultural diversity in learning. It is contingent on ... seeing cultural differences as assets; creating caring learning communities where culturally different individuals and heritages are valued; using cultural knowledge of ethnically diverse cultures, families, and communities to guide*

17: Ladson-Billings, G. (1995). [But that's just good teaching! The case for culturally relevant teaching](#). *Theory Into Practice*, 34(3), 159–165.

## CREATING AN INCLUSIVE CULTURE: CULTURALLY RESPONSIVE TEACHING

*curriculum development, classroom climates, instructional strategies, and relationships with students; challenging racial and cultural stereotypes, prejudices, racism, and other forms of intolerance, injustice, and oppression; being change agents for social justice and academic equity; mediating power imbalances in classrooms based on race, culture, ethnicity, and class; and accepting cultural responsiveness as endemic to educational effectiveness in all areas of learning for students from all ethnic groups.<sup>18</sup>*

CRT depends on building relationships with students and engaging families and caregivers as equal partners. CRT becomes even more important for students who have intersecting identities that are often excluded from mainstream settings, such as low-SES students, LGBTQ students, and students with learning and attention issues.



### CORE IDEA #1

CRT begins with building authentic relationships with students and engaging families and caregivers as *equal* partners. From there, incorporating and celebrating students' cultures, backgrounds, and experiences is the key to fully engaging them in learning.



### DIVERSITY, EQUITY, AND INCLUSION CONNECTION

Culturally responsive teaching improves and enhances the learning opportunities of students who have historically been marginalized in the Pre-K–12 setting. In the past, many culturally and linguistically diverse students were taught at lower levels than their peers, which contributed to students leaving school underprepared for the rigor of postsecondary learning and/or the workplace. CRT supports students in being independent, confident learners and critical thinkers.

For school leaders, CRT means creating a schoolwide commitment to instruction that reflects the diversity of students. It sends the message that teachers and school leaders value students from traditionally marginalized communities as assets. School leaders with a commitment to CRT empower students not only academically, but also socially, emotionally, and politically. CRT has the power to be a transformative tool to defy traditional outcomes.

## WHY IT'S IMPORTANT

### How Culturally Responsive Teaching Supports the 1 in 5 and All Students

**As our student populations become increasingly ethnically diverse, it is essential to use culturally responsive teaching.** CRT is especially important for the 1 in 5. Students who are in the cultural or linguistic minority are often overrepresented in special education because of insufficient instruction and inappropriate referral and assessment procedures.<sup>19</sup> One way to prevent such misidentification is by integrating CRT, a framework based on student assets and high expectations for all students.

CRT not only helps schools avoid mistakenly identifying students for special education; it also helps address the unique needs of students in historically underserved populations who truly have learning and attention issues. These students can face unintentional or implicit bias because of their race, culture, and disabilities. In addition, they may struggle to fully access learning or to express their learning for both

18: Gay, G. (2013). Teaching to and through cultural diversity. *Curriculum Inquiry*, 13(1), 50.

19: Klingner, J. K., Artiles, A. J., Kozleski, E., et al. (2005). Addressing the disproportionate representation of culturally and linguistically diverse students in special education through culturally responsive educational systems. *Education Policy Analysis Archives*, 13(38), 1–39.

## CREATING AN INCLUSIVE CULTURE: CULTURALLY RESPONSIVE TEACHING

cultural *and* neurological reasons. CRT emphasizes understanding the whole child so that caregivers and schools can better support the child's learning together.

CRT moves schools away from approaching instruction with a deficit mindset (i.e., What can't this student do?). Instead, it helps teachers identify student strengths and leverage those to scaffold instruction. It's a powerful practice for meeting the needs of groups who are historically underestimated and educationally neglected.



### CORE IDEA #2

When schools implement the inclusive, strengths-based CRT approach, all students are held to high expectations and given access to academic and lifelong success.

## WHAT IT LOOKS LIKE

### Culturally Responsive Teaching in Action

**Culturally responsive teaching applies to three aspects of the classroom:** the environment, the curriculum, and instructional approaches. To deepen your own understanding and to help teachers reflect on how well their classroom practices model CRT, consider the list below.

#### *For Teachers: How **Culturally Responsive** Is Your Classroom?*

- > **Environment.** You already know that students need a warm, welcoming, and safe environment in order to learn. Classroom environments that are culturally responsive begin with a genuine and authentic interest in knowing students. This helps you reflect the students within your classroom. Consider the visuals on the walls of your classroom. Do they represent the heritage of your students and include depictions of culturally responsive role models? Consider the bookshelves. Do they represent your students in terms of race, ethnicity, culture, religious background, socioeconomic status, sexual orientation, and so on? Incorporate culturally and linguistically responsive language, literature, and music into your classroom, ensuring that students are reflected and respected.
- > **Curriculum.** Consider the curriculum and instructional materials you use. Do they represent diverse cultures, including those present in your classroom? Although you may be required to teach using canonical texts, you can incorporate parallel texts, events, or experiences to make connections to students' diverse backgrounds. Similarly, you can leverage current events that relate to academic topics and promote open discussion among students—such discussions not only help students connect the curriculum with their own backgrounds, but also help them develop critical analysis skills. Give your students choices in the curriculum, such as bringing in books or materials or choosing topics for assignments. This increases their chance to explore and share their own cultures.
- > **Instructional approaches.** Now reflect on how you teach students. Do you encourage student participation and collaboration? Overall, are interactions between you and your students positive? In CRT, the teacher supports students in using their primary language, frames it as an asset, and supports growth in Standard English, respectfully correcting oral or written language errors by modeling correct grammar and sentence structure. To validate and show respect for students' culture, students are encouraged to discuss their own experiences, hopes, and dreams. These discussions provide scaffolding to ensure that all students, including those with learning and attention issues, participate effectively.

#### *The CRT-UDL Connection*

There is a significant overlap between the practices of CRT and **Universal Design for Learning** (UDL). Both practices transform learning environments in response to the diversity of learners in order to promote equitable learning opportunities for all students. Both practices include high expectations for students and strong relationships between school and home. Additionally, in both UDL and CRT, teachers use their knowledge of students' backgrounds to create engaging instruction that is aligned to student needs. For the 1 in 5, synthesizing these frameworks can create accessible and engaging instruction. As you consider implementing CRT, keep the UDL principles in mind: Are there multiple

## CREATING AN INCLUSIVE CULTURE: CULTURALLY RESPONSIVE TEACHING

models of representation, multiple options for engagement, and multiple options for action and expression?

When teachers in your school leverage CRT within a UDL framework, there are obvious signs of student engagement: active listening, discussion, and purposeful peer interaction. The content is highly relevant to students' lives.



### CORE IDEA #3

You don't need to choose between a focus on culturally responsive teaching and Universal Design for Learning. They work together to transform learning environments in response to learner diversity and focus on equitable learning for *all* students.

#### *Family Engagement: The First Step in CRT*

The first step for school leaders and teachers in becoming culturally responsive is demonstrating a genuine interest in learning about students' and families' backgrounds, culture, and heritage. In addition, because some disabilities have a hereditary influence, families might struggle with the same challenges their children face in areas such as reading, writing, or attention.<sup>20</sup> In this way, CRT intersects nicely with the principles of social-emotional learning—integrating perspective-taking and empathy into interactions among educators, families, and students.

CRT requires empowering families and caregivers to be true partners in the learning environment.<sup>21</sup> One important step is [removing barriers](#) to family engagement (e.g., translating materials or ensuring accessibility, bringing a translator to meetings, establishing a parent liaison, etc.). Encourage teachers to invite parents to help in class and talk to the class about their traditions. Both you, as the school leader, and your teachers should invite parents to share their goals and dreams for their children. Let them know that you value their role as their child's first teacher.

[Colorín Colorado](#), a national multimedia project that offers a wealth of bilingual, research-based information, activities, and advice for educators and families of English language learners (ELLs), recommends taking these first steps to learning from your students' families and caregivers:

- Ask families and caregivers about their [questions and concerns](#).
- Ask families and caregivers about their child's interests.
- Ask families and caregivers about their preferred language and communication medium—and honor it!
- Welcome families and caregivers into the school and into classrooms.
- Start small and allow yourself to be vulnerable.

Learning about the cultures in your school can seem like a challenge, but many school leaders and teachers will tell you it's well worth the effort. Becoming culturally responsive is an ongoing process that requires you to be vulnerable. Consider your own culture (especially if you're part of the United States' dominant white culture). Reflect on how your culture is seen by others, and be open to considering your culture and worldview in new ways.

20: Horowitz, S. H., Rawe, J., & Whittaker, M. C. (2017). [The state of learning disabilities: Understanding the 1 in 5](#). Washington, DC: National Center for Learning Disabilities.

21: Schachner, A., Belodoff, K., Chen, W-B., et al. (2016). [Preventing suspensions and expulsions in early childhood settings: A program leader's guide to supporting all children's success](#). SRI International: Menlo Park, CA.



## WHAT YOU MIGHT BE THINKING

### Common Questions and Challenges in Implementing CRT

**Getting started with culturally relevant teaching can feel overwhelming**—so overwhelming that many teachers wind up not changing their practice at all. But for culturally and linguistically diverse students, the commitment of the adults in their school to culturally relevant teaching is essential to their success. Here are some common questions and challenges that you and your teachers might have as you consider how to provide culturally relevant instruction.

#### CHALLENGE OR QUESTION

#### INSIGHT AND TIPS FROM THE FIELD

**I, or some of my teachers, are afraid of offending students, their families, or colleagues.**

CRT begins with identity development—understanding who you are and what lenses you operate from. Once that work is in progress, you can build more meaningful relationships with others. Relationship building involves becoming familiar with the cultures of students in your school, and expecting teachers to do the same with students in their classroom (e.g., with a student interest survey). Talk to students' families and ask questions. What you learn will help you and your teachers develop instructional practices that increase student engagement and learning. If you start from a place of true curiosity and learning and take steps every day, you will build that trust.

**We're excited about implementing CRT, but it seems overwhelming for teachers to do this for every lesson.**

CRT may seem like a lot of work for teachers initially, and it may take some time to get used to. But over time, with deliberate practice, it will become second nature.

**There are so many different frameworks and practices to implement!**

As noted throughout this guide and section, there are strong connections between culturally responsive teaching, Universal Design for Learning, and social-emotional learning. All are about providing access, engagement, and expression in ways that empower students to become expert learners. Integrate CRT and these other frameworks into your existing practices—such as collaborative lesson planning, grade and subject team meetings, and data analysis—to avoid the feeling of another thing on top of what you already do.



#### Stop and Jot

What do you perceive as the biggest barrier to culturally responsive teaching in your school?  
What role can you play in overcoming it? Who can work with you on this?

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## RELATED PSEL 2015 STANDARD(S)<sup>22</sup> For the Success of Students With Disabilities


### Standard 3: Equity and Cultural Responsiveness

*How effective principals meet the standard for the support of students with disabilities:*

- > Ensure the academic success and well-being of each student, including students with disabilities, through equitable access to effective teachers, culturally responsive learning opportunities and supports, and necessary resources.
- > Hold asset-based rather than deficit-based perspectives of students, and recognize relationships among disability, cultural differences, and social inequities.
- > Recognize, confront, and educate others about the institutional forces and historical struggles that have impeded equitable educational opportunities for students with disabilities.

## ADDITIONAL RESOURCES

 Additional knowledge building

 Self-assessment/ implementation support

 Turnkey professional development

 Coaching conversations

 Miscellaneous



### Colorín Colorado

National multimedia project that offers resources, research-based information, activities, curriculum materials, and advice for educators and families of English language learners.



### Culturally Responsive Teaching and the Brain (blog)

The blog of Zaretta Hammond, the author of *Culturally Responsive Teaching and the Brain*. Includes the author's favorite frameworks, tip sheets, book lists, and articles.



### Culturally Responsive Teaching: 4 Misconceptions (podcast)

A 42-minute podcast in which Cult of Pedagogy's Jennifer Gonzalez interviews Zaretta Hammond to unpack some common misconceptions about culturally responsive teaching.



### Culturally Responsive Teaching and the Brain (webinar)

Discussion by Zaretta Hammond of the neuroscience of culturally based learning. Includes:

- > A framework to understand the key principles of culturally responsive teaching
- > Ways to transform your relationship with students into a learning partnership
- > Strategies to support students in developing an academic mindset
- > Techniques to improve student thinking by leveraging culturally and linguistically diverse students' natural learning styles



### Classroom Diversity: An Introduction to Student Differences (IRIS Center)

One-hour learning module that offers a broad overview of how diversity (i.e., culture, language, exceptionality, and socioeconomic status) affects learning and how teachers can better meet the needs of all their students in their classes.



### Teaching Tolerance

Free resources that emphasize social justice and anti-bias work. PD resources on the website include:

- > Training facilitator's guides
- > Webinars
- > Podcasts
- > Self-guided learning modules



### Dual Language Learners With Disabilities: Supporting Young Children in the Classroom (IRIS Center)

One-hour learning module that covers:

- > An overview of young children who are dual language learners
- > The importance of maintaining children's and families' home language while they are learning a new or second language
- > Considerations for screening and assessing these children
- > Strategies for supporting them in inclusive preschool classrooms



### Equity Institute Tools and Resources

Provides a variety of useful tools, including "Building Equity Into Your Teaching Practice" and "Culturally Responsive Walkthrough Tool."

22: Council of Chief State School Officers & Collaboration for Effective Educator Development, Accountability, and Support Center. (2017). [PSEL 2015 and promoting principal leadership for the success of students with disabilities](#). Washington, DC & Gainesville, FL: CCSSO and CEEDAR Center.

## CREATING AN INCLUSIVE CULTURE: CULTURALLY RESPONSIVE TEACHING



### ELL Assessment for Linguistic Differences vs. Learning Disabilities (Language Minority Assessment Project)

Website providing educational assessors with a framework and a process to explore the difference between diverse linguistic/cultural influences and learning (dis)abilities/differences for English language learners. Includes links to additional resources and commonly used assessment instruments.



### The Diversity Responsive Principal Tool

A tool developed by Teaching Tolerance to help school leaders evaluate whether they have taken actions to create and sustain opportunities for all students to learn at high levels.



### Understood.org

Understood.org's resources for educators are designed with CRT in mind. [Understanding Behavior as Communication: A Teacher's Guide](#) and [The Power of Effective Praise: A Guide for Teachers](#) have specific connections to CRT.



### Understood.org en Español

Understood.org's resources for families are also available in Spanish.

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## PRIMARY CONTRIBUTOR

**Claudia Rinaldi**, Ph.D., is the chair of the education department and associate professor in education at Lasell College.

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## CULTURALLY RESPONSIVE TEACHING: INVENTORY FOR ACTION For School Leaders



### Putting It All Together

We've consolidated key practices, steps, and resources to help your school get started on culturally responsive teaching—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice as a school leader, and where you might focus and prioritize your school’s next efforts.

#### PRACTICES OF CRT

#### POTENTIAL NEXT STEPS

**My school represents the diversity of our student population.**

- ☐ Critically look at programming (e.g., assemblies, guest speakers) to ensure that speakers come from a range of backgrounds.
- ☐ Analyze faculty and staff demographics. Do staff demographics match the demographics of the student population? (This includes examining stratification by culture, such as lead teachers versus paraprofessionals versus administrators.)

**My school has methods for engaging with families and caregivers.**

- ☐ [Create a welcoming school environment](#). Greet families in their own language, provide translators, and provide transportation to school events.
- ☐ [Make a personal connection](#) with families and learn about their culture, language, successes, and challenges.
- ☐ Ensure clear communication by [translating all communications](#).
- ☐ Make the enrollment process [manageable](#) and accessible.
- ☐ Provide resources for families to [support their children](#) at school.
- ☐ Identify [ways](#) to invite parents to engage at school.
- ☐ Understand and communicate [your legal rights and responsibility to educate all children](#).

**I can identify effective culturally responsive teaching.**

- ☐ Leverage [this school observation guide](#) to support classroom observations.

**My school has established relationships with community partners.**

- ☐ Identify areas of need or interest that a community partner may be able to support (e.g., afterschool tutoring, adult ESL classes, health services, etc.).
- ☐ [Offer local organizations](#) free space in the school to provide services.
- ☐ Ask families which [organizations](#) they have relationships with.
- ☐ Design accessible [service learning](#) opportunities for students.
- ☐ Learn about the [community school model](#) and strategies for building community partners.

**My school uses effective tools to interrupt implicit bias.**

- ☐ Explore your own [bias](#) through validated questions at [Project Implicit](#).
- ☐ Identify your [cultural competence](#).
- ☐ Practice [prejudice habit-breaking](#).
- ☐ Screen for cultural competence when hiring faculty and staff members. Advocate to increase the diversity of the teaching pool. Create pipelines that will increase diversity in the teaching field from the local community.
- ☐ Design and facilitate professional learning on CRT.
- ☐ Leverage this [school observation guide](#) to support classroom observations.
- ☐ Integrate evidence of CRT into teacher evaluation frameworks.
- ☐ Implement diversity trainings or data-driven equity conversations.



## CULTURALLY RESPONSIVE TEACHING: INVENTORY FOR ACTION For Teachers



### Putting It All Together

We've consolidated key practices, steps, and resources to help you get started on culturally responsive teaching—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice as a teacher, and where you might focus and prioritize your school's next efforts.

#### PRACTICES OF CRT

#### POTENTIAL NEXT STEPS

I have methods for engaging with families and caregivers.

- ☐ Learn about families' [backgrounds and strengths](#).
- ☐ [Invite](#) families into the classroom.
- ☐ Share your hopes, goals, and expectations for your classroom with families. Families from other cultures may have different expectations than yours for a classroom and for school, so it's important to share and learn.
- ☐ Translate materials that are sent home to families.

I create a welcoming classroom environment for all students.

- ☐ Learn how to properly [pronounce students' names](#).
- ☐ Learn students' preferred pronouns.
- ☐ [Assign a peer partner](#), ideally someone who speaks the same language.
- ☐ Invite culture into the classroom (e.g., show and tell, display pictures).
- ☐ Administer [student and caregiver interest surveys](#).
- ☐ Create a [language-rich environment](#), including learning a few words in the student's language.
- ☐ Be mindful of all types of religious holidays and observances.

I provide students with culturally relevant curriculum and materials.

- ☐ Choose [culturally relevant reading materials](#) (e.g., evaluate the characters, experiences, places, and time period of the reading materials).
- ☐ Develop your proficiency in effective instructional strategies for teaching ELLs [here](#) and [here](#).
- ☐ Learn about bilingual education programs, including [SIOP](#) and [GLAD](#).
- ☐ Leverage the UDL framework to increase the accessibility of the curriculum and materials.

I provide students with culturally relevant instructional strategies.

- ☐ Nurture and encourage student participation.
- ☐ Validate students' language and culture.
- ☐ Incorporate [cooperative learning strategies](#).
- ☐ Use [positive behavior strategies](#).
- ☐ Provide instruction that is responsive to students' [varied learning needs](#).

I examine my implicit biases.

- ☐ Explore your own [bias](#) through validated questions at [Project Implicit](#).
- ☐ Identify your [cultural competence](#).
- ☐ Unpack the most important aspects of your identity (e.g., education, race, sexual orientation, ability).
- ☐ Reflect on how your identity affects you as a teacher.
- ☐ Identify your [triggers](#) for stereotypical responses.
- ☐ Practice [prejudice habit-breaking](#).
- ☐ Look at discipline and grouping patterns within your classroom, considering overidentification and underrepresentation of different groups (e.g., English language learners, students with disabilities, different genders, different socioeconomic status).



## CULTURALLY RESPONSIVE TEACHING: SELF-REFLECTION



### Self-Assessment and Planning for Action

The purpose of this section is to support your reflection and conversation about possible next steps for CRT in your school or classroom. Use the questions below to reflect on your current practice.

How does my current practice align to the descriptions in this section of the guide?

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What is one CRT practice that I want to implement, and what steps will I take?

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Which resources presented in this guide will I use, and what professional organizations will I engage with further? (Review “Additional Resources” and “Inventory for Action” to support your next steps.)

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What additional support will I need to implement these strategies? Who in my school or district can support my development?

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# CREATING AN INCLUSIVE CULTURE: UNIVERSAL DESIGN FOR LEARNING



## PLANNING FOR THE EDGES

### Instead of the Middle

**In Erin's first year as a ninth-grade English language arts teacher,** she was frustrated with how disengaged her students were. Nearly a third of them weren't turning in assignments at all by the second part of the year. In a UDL training, Erin learned about the barriers to participation that her approach to teaching and the learning environment might be creating for her students. When she returned to the classroom, she spoke to her students and was surprised to learn that they felt her policy of docking grades for lateness or giving them a zero for failing to turn in an assignment was demoralizing and demotivating.

Erin looked to the UDL guidelines and realized that her students didn't have access to engagement—they weren't interested because they were stressed by her grading practices. Erin redesigned her approach to grading, using a scale that equalized the impact and weight of failing so that students would receive no lower than a 50%. The results were immediate and positive. Students submitted assignments on time much more frequently, and their work was lengthier and more thoughtful.

Erin wasn't done using UDL to make her classroom inclusive. Next, she incorporated multiple methods for students to demonstrate their knowledge. For example, instead of assigning long essays to assess students' reading comprehension, she offered opportunities for one-on-one conversations that allowed her to assess comprehension outside of writing. When it came to essay writing, students could choose how to do it—using a computer or speech-to-text software, creating a series of memes demonstrating their understanding, or creating an online/multimedia essay.

Erin's changes led to noticeable increases in engagement. Eventually, some students asked for extra time not because they were running late, but because they were so deeply involved in their work. Others independently expanded the range of the assignment, while still others asked to collaborate on areas of common interest.

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“Universal Design for Learning is a tool for designing instruction that can be applied to any classroom and any content. It helps teachers design rigorous work with meaningful outcomes. UDL increases a teacher's efficiency in being able to meet the needs of all students.”

*Allison Posey, M.Ed., Curriculum and Design Specialist at CAST*

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“The Universal Design for Learning framework is inclusive education. It helps teachers understand what the barriers are to student learning and how to minimize those barriers. Students become fully engaged participants in their learning.”

*Gabrielle Rappolt-Schlichtmann, Ed.D., Executive Director and Chief Scientist at EdTogether*



## CREATING AN INCLUSIVE CULTURE: UNIVERSAL DESIGN FOR LEARNING

### WHAT IT IS

#### Defining Universal Design for Learning

Traditional classroom experiences are built around the mistaken idea that there is an average or typical student. But as you know from your experience as a school leader, there is no such thing as an average learner. When we plan and teach with the “average” student in mind, we place the burden on students to adapt to their environment and to the curriculum.

The [Universal Design for Learning \(UDL\)](#) framework helps teachers create flexible spaces and learning experiences for students within the general education setting. By proactively designing instruction around the awareness of learners’ varying needs, UDL increases accessibility for all. Sound familiar? Closed captioning, automatic doors, curb cuts and ramps, and kitchen cabinets with pull-out shelves are examples of universal design you probably experience on a daily basis. These design solutions benefit people with disabilities and many others as well.

Working from the UDL framework and guidance, teachers can better meet every student where they are to provide instruction that is flexible, accessible, and challenging. When UDL is implemented proactively and intentionally, students are able to become [expert learners](#), and teachers can raise the bar for all students.

UDL leverages [three critical brain networks](#) that are integral to learning:

#### BRAIN NETWORK

#### ALIGNED UDL PRINCIPLE

##### The affective network (the WHY of learning):

How a learner monitors their environment to set goals, to motivate, and to engage

**Engagement:** Learner interest is essential for engagement, so UDL focuses on instruction designed to be relevant, high-value, and authentic. As a result, learners are willing to sustain effort and persist through learning tasks.

##### The recognition network (the WHAT of learning):

How a learner processes new information and turns it into usable knowledge

**Representation:** Information is presented in multiple ways (text, audio, etc.). As a result, learners construct connections within and between concepts, which leads to new understanding.

##### The strategic network (the HOW of learning):

How a learner plans, organizes, and initiates action

**Action and expression:** Learners have more than one way to interact with the learning material. For example, a group of students who need visual and auditory representation can engage in listening to the text through e-readers, while English language learners can access it and express understanding in the native language and then connect the main concepts in English. As a result, learners are able to demonstrate their understanding more efficiently. Tools like manipulatives, sentence starters, and concept mapping can also be examples.



#### CORE IDEA #1

Universal Design for Learning is a key lever for inclusion because it shifts the thinking from “How are individuals disabled?” to “How are learning environment disabling?” to “How can we design learning environments to enable?”





## CREATING AN INCLUSIVE CULTURE: UNIVERSAL DESIGN FOR LEARNING

### WHY IT'S IMPORTANT

#### How UDL Supports the 1 in 5 and All Students

UDL is an effective and efficient way to think about and address learner variability in instructional design. It gives all students equitable opportunities to succeed by recognizing that all learners are unique, have diverse backgrounds, and learn differently.

For the 1 in 5, UDL is a powerful instructional framework.<sup>23</sup> It gives students options for how they engage with and demonstrate mastery of the content—empowering students to make choices based on their strengths, needs, and interests. When implemented well in the general education setting, [UDL increases the level of support for the 1 in 5](#) and also allows special educators and others to really zoom in on and target learning issues.

UDL is also a powerful tool for those teaching English language learners (ELLs). Although limited in their English language proficiency, ELLs may also have significant variability in their native language. UDL can support teachers in providing scaffolds in a student's native language to increase access, using their prior knowledge and background in the culture and language to process and retain the new content.



### DIVERSITY, EQUITY, AND INCLUSION CONNECTION

The UDL framework increases access to learning, thus making the experience equitable to all. UDL also ensures that students with disabilities are not separated from other students to receive specialized instruction, because the classroom is proactively designed to meet their needs.

UDL is a key lever for [inclusion](#) because it shifts the thinking from “How are *individuals* disabled?” to “How are *learning environments* disabling?” to “How can we design learning environments to *enable*?” While this lens is valuable for students with learning and attention issues, it is also applicable and valuable for anything that may inhibit a student's access to rigorous content in the classroom.

### WHAT IT LOOKS LIKE

#### UDL in Action

Implementing UDL in the classroom requires three important steps:

- 1 The teacher begins by [developing and communicating clear, standards-aligned learning outcomes](#) in developmentally appropriate language. It's crucial that learners understand what they need to achieve within a lesson, whether a skill, content, or other competency. Based on the learning outcome, the teacher considers how students will be assessed. This assessment needs to be tightly aligned to the learning outcome and accessible to all learners.
- 2 With a clearly defined goal, the teacher [anticipates what barriers might affect students' learning](#) by considering where students may be stuck or where reteaching has often been needed in the past. [UDL guidelines](#) can be used to think about barriers in engagement, representation, and action and expression. UDL focuses on reducing barriers in the environment so that learners aren't forced to fix the problem themselves.
- 3 After the teacher completes their analysis of barriers, they can begin to plan instruction using the [UDL guidelines](#). This requires:
  - > Leveraging students' experiences, interests, cultural references, and linguistic backgrounds to make the content relevant and interesting.
  - > Offering choice for students throughout the lesson.
  - > Considering how the content is presented. Will information be presented auditorily and/or visually? What language (e.g., vocabulary, syntax) might be challenging for some students? How can this barrier be reduced (potentially by co-planning with ELL or special education teachers)?
  - > Reflecting on how learners will construct knowledge and make connections to the content; working with students to make explicit connections to patterns or big ideas to support this goal.
  - > Connecting back to the planned assessment to consider how learners can express their learning. What choices can students have for demonstrating their learning? What tools might be needed to enable them to demonstrate this learning?

23: Al-Azawei, A., Serenelli, F., & Lundqvist, K. (2016). [Universal Design for Learning \(UDL\): A content analysis of peer-reviewed journal papers from 2012 to 2015](#). *Journal of the Scholarship of Teaching and Learning*, 16(3), 39–56.



## CREATING AN INCLUSIVE CULTURE: UNIVERSAL DESIGN FOR LEARNING



### CORE IDEA #2

The goal of UDL is expert learning—to build the capacity of all learners to be:

- ① Purposeful and motivated    ② Resourceful and knowledgeable    ③ Strategic and goal-directed

Share the examples below with teachers to give them ideas for how they can implement UDL in the classroom. You and your teachers [can also watch](#) how Eric Crouch, a fifth-grade teacher and Understood Teacher Fellow, incorporates UDL into his daily classroom practice.

ACTION	DESCRIPTION	WHY IT WORKS
Posted lesson goals	Goals are always made apparent in a UDL classroom to let students know what they're working to achieve. Goals for specific lessons might be posted on the wall, or students might write them down or insert lesson goal sheets in their notebooks. The teacher will also refer to goals during the lesson itself.	Engagement: Making goals apparent will help learners remember them and sustain attention or perseverance to reach the outcome.
Assignment options	In a traditional classroom, there may be only one way for a student to complete an assignment, like writing an essay or filling out a worksheet. With UDL, students have multiple options. For instance, students may be able to create a podcast or a video to show what they know. They may even be allowed to draw a comic strip. There are tons of possibilities, as long as students meet the lesson goals.	Action and expression: Providing assignment options reduces barriers to demonstrating learning.
Flexible work spaces	In a UDL classroom, there are flexible work spaces for students. This includes spaces for quiet individual work, small- and large-group work, and group instruction. If students need to tune out noise, they can choose to wear earbuds or headphones during independent work.	Engagement: Providing flexible work spaces increases communication and collaboration among learners, which can increase engagement.  Action and expression: Providing flexible work spaces reduces barriers to demonstrating learning.
Regular, formative feedback	With UDL, students get feedback—often every day—on how they're doing. At the end of a lesson, teachers may talk with individual students about lesson goals. Students are encouraged to reflect on the choices they made in class and whether they met the goals. If they didn't meet the goals, they're encouraged to think about what might have helped them do so.	Engagement: Learners require feedback to sustain motivation for learning.  Representation: Learners require feedback to increase their comprehension and help them identify patterns, critical features, and big ideas.
Digital and audio text (and assistive technology as needed)	UDL recognizes that if students can't access information, they can't learn it. So in a UDL classroom, materials are accessible for all types of learners, regardless of IEP status. Students have many options for reading, including print, <a href="#">digital</a> , <a href="#">text-to-speech</a> , and audiobooks. For digital text, there are also options for text enlargement, along with choices for screen color and contrast. Videos have captions; audio materials have transcripts.	Representation: Learners differ in the ways that they understand information that's presented to them. Providing different options for representation optimizes learning.



## CREATING AN INCLUSIVE CULTURE: UNIVERSAL DESIGN FOR LEARNING

### WHAT YOU MIGHT BE THINKING

#### Common Questions and Challenges in Implementing UDL

There are real challenges and barriers in implementing UDL, but it can be done. Here are some common questions and challenges that you and your teachers may have as you consider how UDL would work in your classrooms.

#### CHALLENGE OR QUESTION

UDL seems to rely on a lot of assistive technology. But that can be really expensive for teachers, schools, and families.

We have a set curriculum that we have to follow, and it doesn't reflect the UDL guidelines described here.

We're excited about implementing UDL, but it seems overwhelming for teachers to do this for every lesson.

#### INSIGHT AND TIPS FROM THE FIELD

UDL does not mean a constant use of technology. There will be times when UDL depends on technology (e.g., for a student who needs enlarged text or speech-to-text), but many [technology tools are free](#).

UDL is not a curriculum. It helps teachers identify how to implement the curriculum in a way that meets their students' range of needs. Using the UDL guidelines, teachers have flexibility in designing instructional strategies for a particular curriculum. They can consider multiple means of representation, student action/expression, and engagement.

UDL is an efficient framework for meeting learners' varied needs, perhaps more so than traditional means of differentiation. It supports teachers in thinking systematically about the common barriers for learning and then addressing those barriers. With UDL, it's likely that students will be more successful at their first attempt with a learning objective, thus reducing the need to reteach or remediate.

Teachers can use [this template](#) to get started with creating UDL-aligned instruction. UDL may seem like a lot of work initially. But over time and with deliberate practice, it will become second nature.



#### CORE IDEA #3

There is no "average" learner. If teachers assume variability in learners and design accordingly, all students have the chance to thrive. Focus on having clear goals, but allow for multiple means of action, representation, and expression to meet those goals.



#### Stop and Jot

What do you perceive as the biggest barrier to UDL in your school? What role can you play in overcoming it?  
Who can work with you on this?

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## CREATING AN INCLUSIVE CULTURE: UNIVERSAL DESIGN FOR LEARNING

### RELATED PSEL 2015 STANDARD(S)<sup>24</sup> For the Success of Students With Disabilities

#### Standard 5: Communities of Care and Support

*How effective principals meet the standard for the support of students with disabilities:*

- > Ensure that students with disabilities have opportunities to learn with their non-disabled peers to the greatest extent possible.
- > Promote inclusive social environments that foster acceptance, care, and sense of value and belonging in adult-student and student-peer relationships.
- > Support teachers as they create productive and inclusive environments in their classrooms and throughout the school.

### ADDITIONAL RESOURCES



Additional knowledge building



Self-assessment/implementation support



Turnkey professional development



Coaching conversations



Miscellaneous



#### CAST

Nonprofit education research and development organization that works to expand learning opportunities for all individuals through Universal Design for Learning. In addition to reports and publications, CAST's website gives access to many [free UDL guidelines and curriculum creation materials](#).



#### Course Enhancement Module: Universal Design for Learning (CEEDAR Center)

Compilation of resources for providing PD on UDL. The module includes:

- > A PowerPoint with speaker notes
- > Links to multimedia (videos and podcasts)
- > Activities for participants
- > Suggested readings



#### Universal Design for Learning: Creating a Learning Environment That Challenges and Engages All Students (IRIS Center)

Interactive, multimedia learning module designed to help educators:

- > Understand the principles of UDL
- > Apply UDL principles to four components of the curriculum: goals, instructional materials, instructional methods, and assessment



#### Novak Education Consulting (blog)

Blog of Katie Novak, an education consultant and author of four books published by CAST on implementation of UDL and universally designed leadership. Blog entries cover many aspects of UDL, including "[5 Effective Coaching Strategies for UDL Implementation](#)."



#### The Principles of Universal Design for Learning (Understood.org)

An introduction to UDL principles and methods. Includes:

- > A [video](#) of how one fifth-grade teacher uses UDL with his class
- > A [handy chart](#) for ideas to put UDL into practice in the classroom



#### Learning Designed

Online learning platform and networked community focused on UDL. The website offers some free resources, plus the opportunity to become a member and get access to learning resources, credentials, certifications, and one-on-one engagement.

### PRIMARY CONTRIBUTORS

**Allison Posey**, M.Ed., is a curriculum and design specialist at CAST.

**Gabrielle Rappolt-Schlichtmann**, Ed.D., is the executive director and chief scientist at EdTogether and an adjunct lecturer at the Harvard Graduate School of Education.

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## UNIVERSAL DESIGN FOR LEARNING: INVENTORY FOR ACTION

### For School Leaders



#### Putting It All Together

We've consolidated key practices, steps, and resources to help your school get started on UDL—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice as a school leader, and where you might focus and prioritize your school's next efforts.

#### PRACTICES OF UDL

**My school has established schoolwide expectations for UDL implementation.**

**My school has tools for observing and coaching teachers on their implementation of UDL.**

**My school offers professional learning on UDL. Our professional learning incorporates the core principles of UDL.**

**My school has technology platforms and products that align to UDL principles (e.g., text-to-speech, dictation software).**

**My school schedules and protects collaboration time for teachers to meet regularly to evaluate their implementation of UDL and make adjustments.**

#### POTENTIAL NEXT STEPS

- ☐ Build your fluency with the [UDL guidelines](#), which support educators and school leaders in implementing the UDL framework.
- ☐ Establish schoolwide expectations for [UDL implementation](#).

- ☐ Create an observation and coaching protocol to support and monitor implementation.

- ☐ Incorporate the UDL framework into professional learning sessions at your school.
- ☐ Ensure that professional learning is coupled with frequent cycles of observation and feedback and data collection.
- ☐ Collect objective data on the impact of UDL practices on mastery.

- ☐ [Evaluate](#) the use of assistive technology in classrooms regardless of students' IEP status. [Technology](#) should be available to all students to increase accessibility. Many [technology tools are free](#).

- ☐ Support effective collaboration among colleagues by (1) scheduling and protecting shared planning times; and (2) providing guidelines for meetings (e.g., review student strengths and needs, review upcoming unit and lesson plans for UDL guidelines, etc.).



# UNIVERSAL DESIGN FOR LEARNING: INVENTORY FOR ACTION

## For Teachers



### Putting It All Together

We've consolidated key practices, steps, and resources to help you get started on UDL—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice, and where you might focus and prioritize your next efforts.

#### PRACTICES OF UDL

#### POTENTIAL NEXT STEPS

**I develop clear learning goals.**

- ☐ Read [these tips](#) developed by CAST that discuss setting learning goals using the UDL framework.
- ☐ Read [these tips](#) developed by CAST that discuss fostering expert learners.
- ☐ Check out the National Center on Intensive Intervention's self-paced learning module on [creating objectives](#).

**I analyze barriers to learning in my classroom, asking myself what is inhibiting my students' abilities to fully engage with instruction.**

- ☐ Conduct a barrier analysis that looks across [instruction, curriculum, environment, and learner factors](#). Consider physical barriers, lack of background knowledge, culturally responsive teaching needs, and learning difficulties and/or social-emotional difficulties that affect connecting with lesson content.
- ☐ Use these [key questions](#) when designing instruction.
- ☐ Read [these tips](#) developed by CAST that discuss designing an engaging learning environment.

**I engage my learners with relevant content and leverage my learners' interests.**

- ☐ Administer a [student interest survey](#) and use your findings to plan instruction and leverage student strengths.
- ☐ Review the “Culturally Responsive Teaching” section of this guide for resources and strategies to identify ways to integrate these practices within the UDL principles. The engagement component of UDL is an ideal place to connect with culturally relevant content, perspective, and expression.
- ☐ Use [choice menus](#).
- ☐ Communicate lesson objectives to students and make relevant connections to real-life application.
- ☐ Prompt students to self-assess their learning via an Exit Ticket. For more ideas on self-assessment, see the [Flexible Grouping guide](#).

**I provide my learners with options for accessing content.**

- ☐ Activate prior knowledge (e.g., spiraled Do Now, KWL chart, anticipation guides, etc.). Consider the [SIOP](#) and [GLAD](#) strategies for English language learners.
- ☐ Frontload new vocabulary.
- ☐ Deliver content in multiple mediums (e.g., oral instructions + visual representations).
- ☐ Provide guided notes.
- ☐ Leverage [technology to promote accessibility](#) (e.g., text-to-speech, dictation software).
- ☐ Provide texts at different levels.

**I provide my learners with multiple means for demonstrating their knowledge.**

- ☐ Read [these tips](#) developed by CAST that discuss designing assessments using the UDL framework.
- ☐ Provide choice in how students demonstrate understanding (e.g., oral exam, performance assessment, etc.).
- ☐ Leverage technology to promote accessibility (e.g., text-to-speech, dictation software).
- ☐ Provide scaffolds to promote writing fluency (e.g., pencil grips, sentence stems, outlines, etc.).
- ☐ Provide scaffolds to promote [oral language](#) fluency (e.g., visuals to illustrate or tag key points, time to rehearse, and scaffolds like sentence starters).
- ☐ Use [tools](#) that allow you to monitor what to expect based on English language levels of various students.





## UNIVERSAL DESIGN FOR LEARNING: SELF-REFLECTION



### Self-Assessment and Planning for Action

The purpose of this section is to support your reflection and conversation about possible next steps for UDL in your school or classroom. Use the questions below to reflect on your current practice.

**How does my current practice align to the descriptions in this section of the guide?**

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**What barriers do students with learning and attention issues experience in my school or classroom? What strategies do I want to implement to address these issues?**

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**Which resources presented in this guide will I use, and what professional organizations will I engage with further? (Review “Additional Resources” and “Inventory for Action” to support your next steps.)**

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**What additional support will I need to implement UDL strategies? Who in my school or district can support my development?**

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# CREATING AN INCLUSIVE CULTURE: POSITIVE BEHAVIOR STRATEGIES

## LOOKING UNDER THE SURFACE

### Working Together to See Behavior as Communication

**Marcus is a seventh-grade student.** In fourth grade, after years of performing behind his peers, he was diagnosed with an attention issue. After his diagnosis, Marcus continued to struggle in school. He was often sent out of class for calling out and disrupting the learning environment. Last year, he missed 15 days and reported that none of his teachers like him.

“When I saw Marcus’s name on my math class roster, I got really nervous,” says Mr. Smith. “I knew from my colleagues that he was labeled as a difficult student and had a number of in-school suspensions last year. But I also consider myself someone who is good at relationship building with students. So during our in-service week, I asked our student support team to meet and make a plan for Marcus’s first day.”

The student support team—Marcus’s general educators, his special educator, and a counselor—came together to better understand Marcus’s behavior. They scheduled several behavior observations to analyze the cause of his disruptive behaviors. They determined that his behavior was signaling both the desire to get what he wanted by being disruptive and a need to move.

Once they understood the behavior and the reasons behind it through discussion with Marcus and the team, they could respond appropriately. They built intentional relationships with Marcus and with his family. And the team made changes to Marcus’s learning environment: For example, he received a wiggle cushion, a fidget ball, and preferential seating away from the window.

“I think seventh grade is a turning point for Marcus. He’s much more engaged in his learning, and his disruptive behaviors have been significantly reduced. When they do occur, I can recognize that it’s his way of communicating that he needs help and then respond with support and reinforcement,” says Mr. Smith.



“When positive behavior strategies are implemented with fidelity and integrity, there’s a community of learning in the school. The practice reduces the stress and anxiety students feel about their success and allows students to have control over their academic destinies.”

*Jerome Schultz, Ph.D., Clinical Neuropsychologist and Author of Nowhere to Hide:  
Why Kids With ADHD & LD Hate School and What We Can Do About It*

## WHAT IT IS

### Defining Positive Behavior Strategies

**As a school leader, you spend a lot of your time and energy supporting teachers as they design and deliver effective instruction.** Together, you implement academic intervention strategies to help students who don’t initially respond. But despite all of this work put toward improving instruction, you likely find that some students are still not engaged because their behaviors—externalized or internalized—are a barrier to their learning. That’s where positive behavior strategies come in.

## CREATING AN INCLUSIVE CULTURE: POSITIVE BEHAVIOR STRATEGIES

Positive behavior strategies are rooted in the understanding that [students' behavior is a form of communication](#). When a student calls out, wanders around the classroom without permission, or puts their head down on the table, these behaviors may be a sign that the student lacks the communication skills to tell us what they need. Or, the student may not even know what they need. It's important to approach behavior that deviates from what's expected with this lens in order to respond appropriately, rather than assume that the student is being intentionally disruptive. Students today come to school with a wide range of developmental histories—some positive, and some negative (e.g., exposure to trauma, little opportunity to learn prosocial behaviors expected in schools, non-adaptive mindsets, etc.). Behaviors that have their roots in such experiences will seldom be effectively addressed by punitive consequences.

To implement positive behavior strategies, teachers need to identify the reasons for students' behaviors. Then, teachers can adjust classroom conditions and routines, as well as the ways they respond to individual students, to encourage positive behaviors.



### DIVERSITY, EQUITY, AND INCLUSION CONNECTION

Disproportionality, both racial and ethnic, in school discipline is a wide-scale problem in Pre-K–12 schools.<sup>25</sup> Data shows that students of color have been found to be up to four times more likely to be suspended than white peers.<sup>26</sup> It's important for schools and districts to undertake ongoing critical analysis of their discipline records to identify—and correct—instances of disproportionality.

Schools need to synthesize evidence-based practices like positive behavior strategies with culturally responsive practices to ensure equal access to learning for all students. That means understanding the population of students in a classroom and school and ensuring that behavior expectations and instruction reflect their cultures.

## WHY IT'S IMPORTANT

### How Positive Behavior Strategies Support the 1 in 5 and All Students

Research shows that the 1 in 5 often face [emotional, social, and behavioral challenges that can have serious, life-altering consequences](#).<sup>27</sup> For example, the 1 in 5 often experience feelings of failure and peer rejection. They are at increased risk of being bullied. They report higher levels of psychological distress and physical and emotional harm compared with their peers without disabilities.<sup>28</sup> These experiences can increase the risk of challenging behavior and absenteeism.<sup>29</sup> Students with disabilities are more than twice as likely to be suspended than students without disabilities, which results in loss of critical instructional time. Moreover, students of color with disabilities face disproportionate rates of suspensions compared with their white peers.<sup>30</sup>

So the stakes are incredibly high for the 1 in 5, and research has shown that positive behavior strategies

25: Skiba, R. J., Horner, R. H., Chung, C-G., et al. (2011). [Race is not neutral: A national investigation of African American and Latino disproportionality in school discipline](#). *School Psychology Review*, 40(1), 85–107.

26: Balfanz, R., Byrnes, V., & Fox, J. (2013). [Sent home and put off-track: The antecedents, disproportionalities, and consequences of being suspended in the ninth grade](#). Prepared for the National Conference on Race and Gender Disparities in Discipline, Dec. 21, 2012; Losen, D., Hodson, C., Keith, M. A. II, Morrison, K., & Belway, S. (2015). [Are we closing the school discipline gap?](#) Los Angeles, CA: Civil Rights Project.

27: Horowitz, S. H., Rawe, J., & Whittaker, M. C. (2017). [The state of learning disabilities: Understanding the 1 in 5](#). Washington, DC: National Center for Learning Disabilities.

28: Hartley, M. T., Bauman, S., Nixon, C., & Davis, S. (2015). Comparative study of bullying victimization among students in general and special education. *Exceptional Children*, 81(2), 176–193.

29: U.S. Department of Education (2016, October 27). [Chronic absenteeism in the nation's schools: A hidden educational crisis](#) (interactive website). Washington, DC: U.S. Department of Education.

30: U.S. Department of Education, Office for Civil Rights (2016, October 28). [2013–2014 civil rights data collection: A first look](#). Washington, DC: U.S. Department of Education.

## CREATING AN INCLUSIVE CULTURE: POSITIVE BEHAVIOR STRATEGIES

can improve outcomes for these students.<sup>31</sup> These practices ensure that challenging behaviors can be addressed early and effectively so that the 1 in 5 can remain in the classroom, engaged in learning, and on the path to graduation.

Although educators are not behavior specialists or therapists, you and your teachers can use positive behavior strategies to provide environments in which all students feel safe and stable, and believe they can succeed.

### WHAT IT LOOKS LIKE

#### Positive Behavior Strategies in Action

As you just read, the first step in implementing positive behavior strategies is to understand the reasons why a given student is engaging in negative behaviors. [Teaching Tolerance](#), an organization that provides resources for educators to create inclusive school communities, categorizes these resources through the acronym EATS: Escape, Attention, Tangible gains, and Sensory needs. You can use the descriptions below to increase your own understanding and share them with your teachers to help them consider behaviors in their classroom through a student-centered lens.

#### EATS: Student Behavior May Express the Need for Escape, Attention, Tangible Gains, and Sensory Relief

FUNCTION	DESCRIPTION	EXAMPLES
Escape	Some students use behavior to avoid a task, a direction, a situation, or even an individual they perceive as difficult.	<p><i>A student who feels confused during a mini-lesson or during independent practice asks to leave the classroom to use the restroom.</i></p> <p><i>A student calls out inappropriate words, which results in being sent to another classroom or the office.</i></p> <p>In both instances, the student may be communicating that they are struggling with the demands of the academic task and would rather avoid the task, even if that means earning a negative consequence.</p>
Attention	Some students behave in negative ways to get attention.	<p><i>A student talks loudly to a classmate or gets out of their seat without permission during independent work time.</i></p> <p>Attention-seeking can spark positive behavior—for instance, a student who works hard on a task to gain teacher praise. But a student who seeks attention through inappropriate behavior may be trying to communicate that they are unsure about their abilities, feel that they can't succeed, need more academic support, and/or need confirmation that they're completing work successfully. This type of behavior may be communicating that the student needs more instruction to meet the learning outcomes, but isn't comfortable using language to let that be known.</p>

31: Bradshaw, C. P., Debnam, K. J., Koth, C., & Leaf, P. J. (2009). Preliminary validation of the Implementation Phases Inventory for assessing fidelity of schoolwide positive behavior supports. *Journal of Positive Behavior Interventions*, 11(3), 145–160; Bradshaw, C. P., Mitchell, M. M., & Leaf, P. J. (2009). Examining the effects of schoolwide positive behavioral interventions and supports on student outcomes: Results from a randomized controlled effectiveness trial in elementary schools. *Journal of Positive Behavior Interventions*, 12(3), 133–148; Madigan, K., Cross, R. W., Smolkowski, K., & Stryker, L. (2016). [Association between schoolwide positive behavioural interventions and supports and academic achievement: A 9-year evaluation](#). *Educational Research and Evaluation*, 22(7–8), 402–421; Simonson, B., Eber, L., Black, A. C., et al. (2012). Illinois statewide positive behavioral interventions and supports: Evolution and impact on student outcomes across years. *Journal of Positive Behavior Interventions*, 14(1), 5–16.

## CREATING AN INCLUSIVE CULTURE: POSITIVE BEHAVIOR STRATEGIES

<b>Tangible gains</b>	Some students use inappropriate behavior to get what they want and on their own schedule. This type of behavior is common among students who struggle with impulse control.	<p><i>A student talks back and is disrespectful when the teacher redirects them.</i></p> <p><i>A student gets agitated when the teacher doesn't answer their question immediately.</i></p> <p>This student may have learned in the past that acting out gets them what they need. In both instances, the behavior is the consequence of a verbal communication skills deficit.</p>
<b>Sensory needs</b>	<p>Students' brains are constantly processing input from their senses. For some students, this <a href="#">information processing is a struggle</a>. <i>Sensory seekers</i> and <i>sensory avoiders</i> underreact or overreact to sensory input. Some students may escape to go to a quieter place.</p> <p><i>Sensory seekers</i> may also resort to behaviors that they know will instigate physical contact from an adult or another student.</p>	<p><i>A student becomes argumentative on the way to the cafeteria and refuses to enter the lunchroom.</i></p> <p>This behavior could mean that the smell of the day's meal choices, noise level, or intensity of the lights are overwhelming. (This would be particularly true if the student consistently became agitated under these circumstances.) The student is trying to communicate that they're feeling sensory overload, but may lack the verbal communication skills to do so effectively.</p>

Once classroom teachers analyze student behaviors to understand the needs those behaviors are expressing, they can work in their classrooms and with specialists to develop plans to encourage more positive behaviors. Here are some suggestions you can pass on to teachers.



### SOME COMMON POSITIVE BEHAVIOR STRATEGIES FOR THE CLASSROOM

**Modify the classroom environment to decrease the frequency, intensity, or duration of the behavior.** To modify your classroom environment, you may need to establish or reestablish class behavior expectations so that they're positively phrased and applicable to all situations (for example, "Be respectful"). It's likely that some students with learning and attention issues have been exposed to intervention strategies that were not delivered with consistency or fidelity. For that reason, these expectations need to be explicitly taught and continually reinforced with positive feedback. You should aim to reinforce positive behavior at a ratio of 5:1 (positive reinforcement:corrective feedback).

**Adjust instruction to increase the likelihood of student success and achievement.** For example, find different ways to [present instruction](#) (e.g., [visual supports](#), [reteaching](#)). Give students choice over how they demonstrate their learning. Modify the length of your lesson to be more developmentally appropriate. Give students multiple opportunities to respond, whether individually or chorally, to increase engagement and also help you identify which students might need additional support. Seat students near peers who model appropriate behavior and who can ignore inappropriate behavior. Seat students near you so that teacher-student interactions occur more easily and quickly and you can use evidence-based strategies such as active supervision and [pre-correction](#). Collaborating with others in the building, like special educators and specialists, can help you brainstorm strategies and approaches. See the "Collaboration" section of this guide to learn about integrated lesson planning, a way your team can suggest and support implementation of these practices together.

**Explicitly teach and reinforce new skills aligned to appropriate behavior** with a specific student, subgroup of students, or the whole class. Consult social skills training curricula that identify the specific teaching strategies for behaviors like following directions, self-monitoring/self-control, asking appropriate questions, and ignoring peer distractions.

**Collaborate with families.** Communicate with families so that they're familiar with the language and behavioral expectations of the classroom. Understand that home expectations might not be the same. Make clear that these are just expectations for the classroom and that parents are welcome to use them at home if they would like, but they aren't expected to. When teachers and families/caregivers communicate supportive messages and work together to understand the underlying cause of behavior needs, it can increase students' engagement, persistence, and investment in appropriate learning behaviors. Start by building trusting relationships: Send positive text messages or emails early in the school year. Get to know your students by [gathering information directly from primary sources](#)—families and caregivers. Understanding who the important adults are in a student's life is key to success.

When a challenging behavior arises, clearly identify the behavior along with documentation. Identify any strategies that the family and/or caregivers are using successfully to address this type of behavior at home. Share the strategies that you're using at school, and seek to use consistent strategies between home and school. Then maintain ongoing communication about how the student is responding at school and at home.

## CREATING AN INCLUSIVE CULTURE: POSITIVE BEHAVIOR STRATEGIES



### CORE IDEA #1

Students' behavior is often a form of communication. It's important to approach behavior that deviates from what's expected with this lens in order to respond appropriately.

### Taking Positive Behavior Strategies Schoolwide

As a school leader, you can make addressing behavior proactively a schoolwide initiative. This ensures that all students will be exposed to consistent expectations and receive supports across school environments (e.g., classroom, cafeteria, school bus).

You can begin by collecting and analyzing data (such as office referrals) that tells you where challenges exist in the school. Particular hotspots are often public settings like the playground, cafeteria, and hallways. In addition, health referrals, counselor referrals, and attendance data can help you identify students who need social or emotional help. Through data analysis, teacher input, and family input, you may determine that the school requires a large-scale change to the way it treats behavior.

Your school's Code of Conduct can identify consequences for targeted behavior transgressions, but it doesn't typically consider the cause or background of those transgressions. As your school develops practices to increase student engagement, it is important to re-evaluate and revise the Code of Conduct to ensure that its application does not result in practices that deny equity in access to quality schooling. You can also advocate for similar changes in your district-level Code of Conduct.

Positive behavior interventions and supports (PBIS) is a schoolwide, evidence-based approach to changing behavior. PBIS works along a continuum of three different levels of support intensity:

- > Tier 1 (supports for ALL students): Universal practices are experienced by all students and establish a predictable, consistent, positive, and safe climate across all school settings
- > Tier 2 (supports for SOME students): Targeted practices are implemented for groups of students who need more structure, feedback, instruction, and support than Tier 1 on its own
- > Tier 3 (supports for a FEW students): Indicated practices are more intense and individualized to meet the challenges of students who need more than Tiers 1 and 2 on their own

### A Note on Trauma, Learning and Attention Issues, and Behavior

When implementing positive behavior strategies, educators should be aware of how trauma can impact students, and how trauma intersects with learning and attention issues to affect student behavior. Early childhood trauma can cause disruption to the developing brain and lead to an increase in cognitive impairment, attention deficits, learning challenges, hyperactivity, anxiety, and difficulty with self-regulation and memory. Specifically, research shows a direct correlation between high Adverse Childhood Experiences (ACE) scores and impulsivity, hyperactivity, executive function, and memory<sup>32</sup>. This manifestation of trauma can sometimes look like attention-deficit hyperactivity disorder (ADHD), at times causing a potential misdiagnosis. Creating safe, stable, nurturing relationships and classroom environments can help reduce the effects of trauma and align with the supports for positive behavior strategies in the classroom.

32: Brown, N. M., Brown, S. N., Briggs, R. D., et al. (2017). Associations between adverse childhood experiences and ADHD diagnosis and severity. *Academic Pediatrics*, 17(4), 349–355.

## CREATING AN INCLUSIVE CULTURE: POSITIVE BEHAVIOR STRATEGIES



### CORE IDEA #2

Positive behavior strategies are critical to ensuring that the 1 in 5 remain in the classroom, engaged in learning, and on the path to graduation.

## WHAT YOU MIGHT BE THINKING

### Common Questions and Challenges in Implementing Positive Behavior Strategies

Dealing with off-task or negative behaviors can be frustrating and is often a big concern for teachers and school leaders—one that educators tell us they often feel ill-equipped to deal with effectively and efficiently. There are real challenges and barriers in implementing positive behavior strategies, but it can be done. Here are some common questions and challenges that you and your teachers may have as you implement positive behavior strategies.

### CHALLENGE OR QUESTION

### INSIGHT AND TIPS FROM THE FIELD

It's hard for teachers to analyze the function or occurrence of behaviors when they're in the middle of a lesson.

- > Suggest that teachers collaborate with a member of the school behavior team (behavior specialist, counselor, school psychologist) to obtain or create a checklist to note the occurrence of behaviors throughout a lesson.
- > Encourage them to invite a colleague into their classroom to observe a student, and then follow up with the colleague to debrief the observation and get their insights.
- > Suggest that teachers plan time after the lesson to speak with the student (at lunch, before school, etc.) to share what the teacher observes and give the student time to ask questions.

My school already subscribes to a particular behavior management approach.

- > It's likely that this behavior management system works for most students. But 5 to 15 percent of students may need more intensive, individualized support.
- > Look for ways to integrate these strategies while also exploring the adoption of an evidence-based model like PBIS.

Teachers may say, "I already tried one of these suggestions, and it didn't work."

- > Ask the teacher to keep in mind how many attempts it takes them as adults to change a behavior or a routine.
- > Changing behavior takes consistency and fidelity. Encourage the teacher to reflect on their past attempts: Did they choose a strategy and implement every step, including providing positive and corrective feedback? (5 positive comments:1 correction is the goal ratio.) Offer to observe the teacher and help diagnose where the breakdown might be.
- > Suggest that the teacher consult with your school's behavior resources (e.g., school psychologist, counselor) to monitor the student's progress and response to the intervention over several weeks before adjusting or changing their approach (and then be willing to try something else that might work better for that particular student).
- > Encourage the teacher to collaborate with peers and support staff to develop and implement new strategies.

## CREATING AN INCLUSIVE CULTURE: POSITIVE BEHAVIOR STRATEGIES

Students are coming in with much deeper needs than teachers feel equipped to support.

- > Positive behavior strategies intersect with and support [trauma-informed instruction](#) and the creation of safe learning environments.
- > Encourage teachers to reach out to other partners in the school or community—like the guidance counselor, the social worker, or the family—to get additional support.



### Stop and Jot

What do you perceive as the biggest barrier to the implementation of positive behavior strategies in your school?  
What role can you play in overcoming it? Who can work with you on this?

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## RELATED PSEL 2015 STANDARD(S)<sup>33</sup> For the Success of Students With Disabilities

### Standard 3: Equity and Cultural Responsiveness

*How effective principals meet the standard for the support of students with disabilities:*

- > Recognize, confront, and educate others about the institutional forces and historical struggles that have impeded equitable educational opportunities for students with disabilities.

### Standard 5: Communities of Care and Support

*How effective principals meet the standard for the support of students with disabilities:*

- > Build and maintain a safe, caring, and healthy environment that meets the needs of each student and encourages them to be active, responsible members of their community.


33: Council of Chief State School Officers & Collaboration for Effective Educator Development, Accountability, and Support Center. (2017). [PSEL 2015 and promoting principal leadership for the success of students with disabilities](#). Washington, DC & Gainesville, FL: CCSSO and CEDAR Center.



## CREATING AN INCLUSIVE CULTURE: POSITIVE BEHAVIOR STRATEGIES

### ADDITIONAL RESOURCES

-  **Additional knowledge building**
-  **Self-assessment/implementation support**
-  **Turnkey professional development**
-  **Coaching conversations**
-  **Miscellaneous**

 **Course Enhancement Module on Classroom and Behavior Management (CEEDAR Center)**  
Compilation of resources for providing PD on assessment tools and intervention practices that can be integrated with a comprehensive, evidence-based behavioral intervention program. Includes:

- > A PowerPoint with speaker notes
- > Links to multimedia (videos and podcasts)
- > Activities for participants
- > Suggested readings

 **PBIS.org**

Website of the Technical Assistance Center on PBIS, funded by the U.S. Department of Education to support schools, districts, and states in building systems capacity for implementing a multi-tier approach to social, emotional, and behavior support. The website includes detailed information and resources.

 **PBIS Cultural Responsiveness Field Guide**

Field guide designed to assist trainers and coaches working with schoolwide PBIS teams (or other school leadership teams) seeking to implement culturally responsive practices systemically to enhance equity in school discipline.

 **Safe and Civil Schools**

To improve school climate and culture using a proactive, positive, and instructional approach, provides tools and resources designed to help educators:

- > Develop better behavior management strategies in schools
- > Learn effective classroom management procedures
- > Implement schoolwide positive behavior support and response to intervention (RTI) for behavior
- > Design and implement a better school improvement plan

 **The Trauma and Learning Policy Initiative**

Website that provides resources (such as reports and videos) to help schools develop a whole-school approach to trauma sensitivity.

 **The Treatment and Services Adaptation Center**

Website of an organization that promotes trauma-informed school systems. Includes an assessment instrument to help schools reflect on:

- > Targeted interventions for trauma
- > Early interventions for trauma
- > Classroom-based strategies
- > Whole-school trauma programming
- > Whole-school prevention programming
- > Whole-school safety planning
- > Community and family supports

 **Restorative Justice: Resources for Schools (Edutopia)**

Offers a collection of guides for successful implementation of restorative justice programs and examples of successful programs.

 **Evidence-Based Behavior Strategy: Nonverbal Signals (Understood.org)**

Gives a detailed explanation of how teachers can foster communication while limiting interruptions during instruction (and allowing students to communicate their needs without drawing attention to themselves) by using nonverbal signals.

 **Evidence-Based Behavior Strategy: Pre-correcting and Prompting (Understood.org)**

Gives a detailed explanation of how teachers can use pre-correcting and prompting to tell and remind students of behavior expectations before potential behavior problems occur.

 **Evidence-Based Behavior Strategy: SLANT (Understood.org)**

Describes how to teach students SLANT (Sit up straight, Lean toward the speaker, Ask and answer questions, Nod “yes” or “no,” and Track the speaker with your eyes)—a strategy that helps students pay attention.

## CREATING AN INCLUSIVE CULTURE: POSITIVE BEHAVIOR STRATEGIES



### Evidence-Based Behavior Strategy: When-Then (Understood.org)

Describes how to use when-then statements to nudge students toward appropriate classroom behaviors. Such statements clearly explain what the teacher expects—and the positive outcome that will result.



### Using Positive Behavior Supports at a Trauma-Informed School (video)

A video interview with Carl Sumi of SRI International. Explains how the practices of PBS and trauma-informed schools align.

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## PRIMARY CONTRIBUTORS

**George M. Batsche**, Ed.D., is professor and director emeritus of the Institute for School Reform at the University of South Florida. He is co-director of the Florida Statewide Problem-Solving/Response to Intervention Project for the Florida Department of Education.

**Jerome Schultz**, Ph.D., is a clinical neuropsychologist, consultant, and lecturer in psychology at the Harvard Medical School Department of Child Psychiatry. He is an Understood Expert.

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## CREATING AN INCLUSIVE CULTURE: POSITIVE BEHAVIOR STRATEGIES

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## POSITIVE BEHAVIOR STRATEGIES: INVENTORY FOR ACTION For School Leaders



### Putting It All Together

We've consolidated key practices, steps, and resources to help your school get started on positive behavior strategies—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice as a school leader, and where you might focus and prioritize your school's next efforts.

#### PRACTICES OF POSITIVE BEHAVIOR STRATEGIES

**My school has a comprehensive data system for monitoring academic progress, behavioral incidents, attendance, and other critical indicators across classrooms.**

**My school has established a continuum of behavior support tailored to address the needs of *all* students as informed by data.**

**My school has resources to support PBIS implementation.**

**I have a network of peers with whom I can share successes and problem-solve.**

**My school clearly communicates behavioral expectations to families and caregivers and involves them as partners in supporting positive behaviors.**

#### POTENTIAL NEXT STEPS

- ☐ Establish a system to collect and analyze data (e.g., attendance, grades, student opinions).
- ☐ Collect and analyze additional data as needs arise (e.g., data on disproportionality by race, special education status, etc.).
- ☐ Establish monthly data analysis meetings.
- ☐ Routinely share data with staff members.

- ☐ Follow PBIS.org's [Implementation Blueprint](#).
- ☐ Analyze student disciplinary records to determine why students are referred to the office.
- ☐ Establish and get staff buy-in for [three to five positive behavior expectations that can serve as the basis for positive school behavior guidelines](#).
- ☐ Define those behaviors in public spaces.
- ☐ Define those behaviors in classrooms.
- ☐ Ensure the behavior support continuum engages all educators in the school.

- ☐ Display schoolwide expectations in all public spaces.
- ☐ Establish a reward and/or recognition system aligned to student interests.
- ☐ Develop a behavior curriculum for teaching expectations, rules, routines, and procedures.
- ☐ Establish time for staff [professional learning](#) and problem-solving.
- ☐ Ensure that instructional coaches and/or other leaders are trained to promote PBIS.

- ☐ Join a [professional network of peers](#) implementing PBIS.
- ☐ Engage and participate in professional organizations that focus on this area or who publish practitioner research—e.g., the [Council for Exceptional Children \(CEC\)](#), the [Council for Children with Behavioral Disorders \(CCBD\)](#) (and the educator magazine *Beyond Behavior*), and the [Association for Positive Behavior Support \(APBS\)](#).

- ☐ Review your school's Code of Conduct first to ensure that it does not result in practices that deny equity in access to quality schooling.
- ☐ Provide all behavioral expectations in the native language of the family/caregivers and reinforce it in multiple ways (on paper during back-to-school events, in person at back-to-school nights, etc.).
- ☐ Leverage [questionnaires and conversations](#) to engage and partner with families to understand what works for their child.
- ☐ Gather family and caregiver information for any context outside of school to understand [what a student's behavior may be communicating](#).
- ☐ Before having any conversations about behavior, incorporate an understanding of [potential barriers](#) families may have regarding engaging with the school.



## POSITIVE BEHAVIOR STRATEGIES: INVENTORY FOR ACTION For Teachers



### Putting It All Together

We've consolidated key practices, steps, and resources to help you get started on positive behavior strategies—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice and where you might focus and prioritize your next efforts.

#### PRACTICES OF POSITIVE BEHAVIOR STRATEGIES

#### POTENTIAL NEXT STEPS

**My physical classroom layout is intentionally designed to support students.**

☐ Design your [classroom layout](#) to support different types of learning. Arrange furniture to ensure smooth transitions. Arrange materials in a safe, accessible way.

**Positive behavior expectations are posted and defined in my classroom.**

☐ Create classroom expectations that are positively framed (i.e., observable, measurable, positive, and understandable) and [limited to three to five statements](#). Consider framing them in a “Rights and Responsibilities” poster. (For example, a student right could be “Learn in a safe, orderly, and positive learning environment.” The student responsibility could be “Contribute to a safe learning environment by behaving safely and respectfully, and by reporting dangerous or harmful situations to an adult.”)

**I have a system for teaching behavior expectations.**

☐ Plan, teach, and practice expected behaviors.  
☐ Plan, teach, and practice [routines and procedures](#).

**I have a system for active supervision and proximity.**

☐ Establish a process for [monitoring your classroom](#) and frequently checking in with students.

**I have a system for responding to positive behaviors.**

☐ [Use verbal cues](#) to name the positive behavior and acknowledge approval.  
☐ Provide rewards for demonstrating positive behavior.

**I have a system for responding to negative or off-task behaviors.**

☐ [Collect data](#) to determine the cause of the behavior and inform individualized support.  
☐ Explicitly teach and reinforce new skills aligned to appropriate behavior.  
☐ Collaborate and communicate with families and caregivers.  
☐ [De-escalate](#) severe behaviors.

**I deliver instruction to students that is engaging and challenging, but accessible.**

☐ Support students by leveraging a [competence anchor](#).  
☐ Differentiate instruction using the [Universal Design for Learning](#) framework and/or [culturally responsive teaching](#).  
☐ Provide frequent opportunities for students to respond to questions.  
☐ Design practice opportunities that are likely to yield high rates of student success.

**I build partnerships with families and caregivers to enlist their support for positive behaviors at school.**

☐ Communicate to families the language and behavioral expectations of the classroom.  
☐ [Gather information about students](#) directly from families and caregivers.

**I have a plan on how to engage the family when a student demonstrates challenging behavior.**

☐ Provide access to positive communication, an action plan, and follow-up.  
☐ Ask families what strategies they are using successfully to address this type of behavior in the home.  
☐ Consider an interpreter for a family or caregiver liaison.

**I regularly assess whether discipline policies are carried out equitably and free of bias in my classroom and school.**

☐ [Examine disciplinary data](#) to see how it impacts students by race and ethnicity, free/reduced lunch status, disability status (both [special education classification](#) and [504 status](#)), and ELL/bilingual classification. Review data regularly to ensure that no group is [disproportionately](#) subject to discipline, and modify discipline policies to address bias as appropriate.

## POSITIVE BEHAVIOR STRATEGIES: SELF-REFLECTION



### Self-Assessment and Planning for Action

The purpose of this section is to support your reflection and conversation about possible next steps for positive behavior strategies in your school or classroom. Use the questions below to reflect on your current practice.

How does my current practice align to the descriptions of positive behavior strategies in this section of the guide?

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What strategies do I want to begin implementing?

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Which resources presented in this guide will I use, and what professional organizations will I engage with further? (Review “Additional Resources” and “Inventory for Action” to support your next steps.)

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What additional support will I need to implement these strategies? Who in my school or district can support my development?

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# CREATING AN INCLUSIVE CULTURE: FLEXIBLE GROUPING



## FROM FIXED TO FLEXIBLE

### Targeting Instruction and Removing Stigma

**Ms. Starling's eighth-grade algebra class begins** with a Do Now reviewing the previous day's content on using square root symbols to represent solutions to equations. Yesterday, about 75 percent of students showed mastery of the topic, but Ms. Starling wants to be sure of her students' retention.

As students complete the three-problem Do Now, Ms. Starling circulates. She observes each student's work, noting who's showing retention of yesterday's content and making notes of any common errors. She spends a little extra time at the desks of the six students who did not show mastery yesterday, providing a couple of prompts and helpful reminders. As the Do Now wraps up, Ms. Starling jots down the names of the students she saw making errors so she can clarify those mistakes during the review. She reviews the Do Now with the class and then begins her direct instruction. Throughout her instruction and guided practice, Ms. Starling makes mental notes of which students are demonstrating understanding and which are not.

When students transition to independent practice, Ms. Starling calls out a few announcements. "Josiah, Simon, Alex, J.P., Stephanie, and Aliana—please bring your notebooks to the back table to meet with me for about eight minutes. And I'd like Alyssa and Matthew and also David and Solange to meet as a small group at the group work station."

"As a teacher, you see your struggling students. You have to be able to balance your time between that and the other ones who are getting it. It can be a tension," says Ms. Starling. But flexible grouping structures give her an efficient way to address this challenge. She'll be able to meet with a small group of students who need some additional review and support before they attempt the independent practice, and she's paired up four students who can support each other.

“

"As an educator, you can't always anticipate every hiccup in your instruction; you can't predict every student misconception. So when you uncover new student needs, flexible grouping gives you the immediate opportunity to meet those needs."

*Kristen Hodnett, M.S.Ed., Clinical Professor of  
Special Education at Hunter College*

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"Flexible grouping increases student achievement and it also promotes social-emotional learning. Students get to interact with peers from different cultures, with different languages, and with different cognitive levels. It provides rich interactions and facilitates creating a community of learners."

*Claudia Rinaldi, Ph.D., Associate Professor and Chair  
of the Education Program at Lasell College*

## WHAT IT IS

### Defining Flexible Grouping

**In any given classroom, how many students consistently function at the same academic, social-emotional, or linguistic level every day?** Today's inclusive classrooms work on the assumption that students come with varying levels of strengths and needs, which shift constantly depending on the content area, the specific objective, or even the time of day. Flexible grouping supports these varying levels of learning ability, from early childhood grades to secondary grades and across all content areas.



## CREATING AN INCLUSIVE CULTURE: FLEXIBLE GROUPING

To implement flexible grouping, teachers need to be **data-driven**. Flexible grouping requires using data to frequently rearrange students into interactive small-group learning opportunities. This data might include universal screening measures (e.g., DIBELS) or curriculum-based measurements. Teachers can also use their own observations or student self-assessments based on the objective for that day (for example, the previous day's Exit Ticket). In any of these scenarios, teachers are looking to see how students are performing against an exemplar in order to provide additional support and enrichment.



### CORE IDEA #1

In an inclusive classroom, data-based flexible grouping is an efficient tool for meeting the needs of all learners while also removing the stigma associated with extra teacher support.



### DIVERSITY, EQUITY, AND INCLUSION CONNECTION

Flexible grouping is an inclusive strategy that allows teachers to effectively meet the needs of students, but without drawing attention to differences or stigmatizing students. In an MTSS framework, flexible grouping is a structure that supports the implementation of Tier 2 and Tier 3 interventions as well. Similarly, it can be effectively used to deliver supports to English language learners.

As a strong strategy for equity and inclusion, this style of organizing your classroom seating allows for students to work both collaboratively and collectively. The best classroom seating arrangements can often be ones designed by the students to meet their individual needs.

## WHY IT'S IMPORTANT

### How Flexible Grouping Supports the 1 in 5 and All Students

When we spoke with teachers across the country about their current challenges in serving the 1 in 5, one clear tension that arose was how to fully meet the learning needs of students who are struggling to meet grade-level standards while continuing to support and challenge students who are already at grade level. Flexible grouping is an effective strategy that benefits the 1 in 5, English language learners (ELLs),<sup>34</sup> and even advanced learners.<sup>35</sup>

For the 1 in 5 specifically, **flexible grouping** allows students to get the right support, in the right way, at the right time. It allows for inclusion in the general education classroom<sup>36</sup> but tailors support and intervention to the areas each student needs the most. And as we consider the unique social and emotional needs of students with learning and attention issues, flexible grouping can also allow the 1 in 5 to understand and showcase their areas of strength in some groups.

Flexible grouping is an efficient strategy for remediation, as well as enrichment opportunities for students who are ready to move on to the next learning target. When flexible grouping is a daily routine, it reduces the stigma of "needing" to meet with the teacher for small-group work—these meetings become a normal expectation. And since the groups change frequently, flexible grouping avoids the static nature of grouping students based on ability level alone—something that can increase the stigma

34: Castle, S., Baker Deniz, C., & Tortora, M. (2005). Flexible grouping and student learning in a high-needs school. *Education and Urban Society*, 37(2), 139–150.

35: Tomlinson, C. A. (1995). *Differentiating instruction for advanced learners in the mixed-ability middle school classroom* (ERIC Digest 389141 1995-10-00). Reston, VA: ERIC Clearinghouse on Disabilities and Gifted Education.

36: Ross, D., & Fisher, D. (2009). Talking in class builds English learners' proficiency. *California English*, 14(4), 10–12.



## CREATING AN INCLUSIVE CULTURE: FLEXIBLE GROUPING

the 1 in 5 often feel in school in traditional, fixed groupings.

Additionally, flexible grouping is particularly effective for supporting ELLs, including those who have learning and attention issues. Depending on the structure, e.g., a Turn and Talk or reciprocal teaching (see below), it allows for greater interaction between a peer who speaks English fluently—thus serving as a model—and one who is just acquiring the language. In this scenario, flexible grouping can support modeling and translation. It also provides a safe opportunity to practice academic and interpersonal language. ELLs may also be empowered and more confident in this structured learning environment.

Since flexible grouping is just that—flexible—it can be leveraged in the moment to make immediate adjustments, rather than waiting for the next instructional day. In a small group, students will receive more practice opportunities at their instructional level and increased teacher feedback. The IRIS Center reports that *all* students in classrooms that leverage flexible grouping show gains in academic outcomes.<sup>37</sup>



### CORE IDEA #2

Flexible grouping is an efficient strategy for both remediation *and* enrichment opportunities for students who are ready to move on to the next learning target—especially the 1 in 5.

## WHAT IT LOOKS LIKE

### Flexible Grouping in Action

If your school uses the [Universal Design for Learning framework](#), you will already have many of the structures in place that support flexible grouping. As the school leader, you can also take many actions that support and improve flexible grouping practices in and across classrooms. For example, you can establish shared planning time for grade-level teams and/or for classroom teachers and specialists to analyze student data together and discuss grouping options. You can also schedule teaching times strategically to allow for flexible grouping across classrooms when teachers may have different skills in closing different skill gaps. You should also provide professional development and coaching for flexible grouping methods, such as reciprocal teaching.

As a quick PD tool, share the following description of the steps in flexible grouping with teachers to help them expand their use of this practice.



### For Teachers: Steps in Flexible Grouping

1

**Clearly define the learning objective for your lesson.**

**Why it matters:** The clearer you are on what students need to master by the end of the lesson, the more intentional you can be about the groups you create.

2

**Determine what type of group you need to meet the objective.**

**Why it matters:** In flexible grouping, groups stay together just for the length of time necessary for students to develop an identified skill like long vowel sounds (homogeneous grouping), master a specific concept like making inferences (heterogeneous grouping), or accomplish a task like participating in a book club (either homogeneous or heterogeneous grouping). Flexible grouping is distinctly different from fixed partnerships or student groups that are organized around general achievement rates and that don't change based on student needs or acquisition of skills or knowledge. Flexible grouping reduces the stigma of being pulled by a teacher into a small group.

3

**Review your data to consider the grouping strategies specific students may need.**

**Why it matters:** In a classroom using flexible grouping, it's common to see a variety of grouping strategies and sizes. In elementary grades, this might look like students rotating among different learning stations or engaging in a Turn and Talk. In upper elementary, middle, and high school,

37: IRIS Center. [Flexible grouping](#). Teaching English language learners: Effective instruction practices (online learning module). Nashville, TN: IRIS Center Peabody College Vanderbilt University.

## CREATING AN INCLUSIVE CULTURE: FLEXIBLE GROUPING

students might engage in collaborative learning structures with clearly defined roles (e.g., facilitator, timekeeper). A hallmark of flexible grouping is that while students are working toward the same learning target, the work addresses students' varying learning needs. The work is respectful, meaning that it's equally engaging and important for all students in the group.<sup>38</sup>

### 4

#### Plan the whole-group debrief.

**Why it matters:** At the conclusion of a lesson, students return as a whole group to make connections between their learning and the learning target. They also engage in debriefs of the group learning process itself—how effectively did their group work together? This debrief can be achieved through a whole-group discussion, an Exit Ticket, or as part of the group's assignment. You might ask students to reflect on how their group work went today and what they need to do differently next time.

**Reciprocal teaching** is one effective structure for implementing flexible grouping. It's a peer- or teacher-mediated instruction format that requires students, peers, and teachers to take on roles and follow a systematic procedure to learn content and/or improve skills.<sup>39</sup> It takes advantage of the heterogeneity of skill levels and interests. To help you explore this format, the table below highlights two specific examples of reciprocal teaching in action.

EXAMPLE	DESCRIPTION	LEARN MORE
<b>Collaborative Strategic Reading (CSR)</b>	Students work in small groups to apply comprehension strategies to a text, typically in science or social studies. CSR improves reading comprehension and promotes student engagement.	<a href="#">IRIS Center module on CSR</a> <a href="#">Reading Rockets: Using Collaborative Strategic Reading</a>
<b>Peer-Assisted Learning Strategies for Reading (PALS-R or PALS)</b>	Students work together in pairs, working as the coach and as the reader. PALS is used to improve reading skills.	<a href="#">IRIS Center module on PALS for grades K–1</a> <a href="#">IRIS Center module on PALS for grades 2–6</a> <a href="#">IRIS Center module on PALS for grades 7–12</a>

## WHAT YOU MIGHT BE THINKING

### Common Questions and Challenges in Implementing Flexible Grouping

There are real challenges and barriers in implementing flexible grouping practices, but it can be done. Start small if you need to and build each week, month, and school year. Here are some common questions and challenges that you and the teachers in your school might express as you implement flexible grouping.

#### CHALLENGE OR QUESTION

This seems like a lot of data to manage.

#### INSIGHT AND TIPS FROM THE FIELD

There are many types of data teachers can use to inform small groupings. For responsive groupings, like the example from Ms. Starling's class, a simple checklist on a clipboard can help the teacher stay organized to respond to student needs throughout instruction.

38: Tomlinson, C.A., & Imbeau, M. (2014). [Leading and managing a differentiated classroom](#). Alexandria, VA: ASCD.

39: Williams, J. A. (2010). Taking on the role of questioner: Revisiting reciprocal teaching. *The Reading Teacher*, 64(4), 278–281.

## CREATING AN INCLUSIVE CULTURE: FLEXIBLE GROUPING

This seems like inviting a three-ring circus into the classroom! Teachers may be nervous about managing this much student movement.

Before teachers implement flexible grouping as a routine, it's important that they set expectations with students. Encourage teachers to start by writing out their expectations, and then teaching these routines to students. Suggest that teachers prepare by asking themselves questions like:

- > How do I want students to move from activity to activity?
- > At what volume level?
- > How should I store materials?
- > What role should each person play in the group?

Putting time in up front on the expectations and routines pays off in the ability teachers gain to differentiate instruction and target needs rather than derailing the whole class.



### Stop and Jot

What kinds of flexible grouping are teachers in your school already implementing? What do you perceive as the biggest barrier to further implementing flexible grouping in your school? What role can you play in overcoming it?

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## ADDITIONAL RESOURCES

-  Additional knowledge building
-  Self-assessment/implementation support
-  Turnkey professional development
-  Coaching conversations
-  Miscellaneous



### High-Leverage Practice: Establish a Consistent, Organized, and Respectful Learning Environment (Council for Exceptional Children)

A 20-minute video designed to augment professional learning for establishing a consistent, organized, and respectful learning environment. The video:

- > Describes important steps
- > Shows how a variety of teachers implement the practice with all students, not just students with learning and attention issues



### Peer Support in Inclusive Settings (Inclusive Schools Network)

Article describing three innovative ways to use peer supports to meet the instructional and social needs of students with disabilities in the general education setting:

- > Collaborative learning
- > Cross-age supports
- > Peer modeling



### Differentiated Instruction: Maximizing the Learning of All Students (IRIS Center)

Three-hour interactive, multimedia learning module for educators. Topics include:

- > Understanding the key elements of differentiated instruction
- > Differentiating instruction based on students' readiness level, interests, and learning needs
- > Differentiating instruction for three main instructional components: content, process, and product
- > Evaluating and grading differentiated products
- > Preparing students and classrooms for differentiated instruction

## CREATING AN INCLUSIVE CULTURE: FLEXIBLE GROUPING



### Ability Grouping, Tracking and Grouping Alternatives (Teaching Tolerance)

Five-minute video in which experts discuss the history, practice, and perils of grouping students for classroom instruction according to their perceived abilities, as well as alternatives.

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## PRIMARY CONTRIBUTORS

**Kristen Hodnett**, M.S.Ed., is a clinical professor in the department of special education at Hunter College.

**Claudia Rinaldi**, Ph.D., is the chair of the education department and associate professor in education at Lasell College.

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## FLEXIBLE GROUPING: INVENTORY FOR ACTION For School Leaders



### Putting It All Together

We've consolidated key practices, steps, and resources to help your school get started on flexible grouping—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice as a school leader, and where you might focus and prioritize your school's next efforts.

#### PRACTICES OF FLEXIBLE GROUPING

In my school, there is a policy against ability tracking students.

In my school, teachers create a learning environment that is responsive to student needs.

In my school, teachers understand and communicate about student learning needs.

In my school, teachers frequently assess student learning.

In my school, teachers provide rigorous instruction aligned to student needs.

#### POTENTIAL NEXT STEPS

☐ Establish and communicate a policy for effective grouping. Flexible grouping is specifically designed to avoid having students “tracked” into one group for the whole year or semester.

☐ Establish a community of learners where taking academic risks is normal and expected.

☐ Implement [Universal Design for Learning](#).

☐ Establish weekly or monthly [data meetings](#) for grade-level teams. Wherever possible, ensure that special educators and other related service providers can attend.

☐ Establish shared planning times for general educators, special educators, and related-service providers.

☐ Consider establishing other creative scheduling arrangements to allow for grouping across classrooms, such as common grade level or subject level teaching times.

☐ Establish effective routines for collecting and analyzing formative assessment data (e.g., Do Now, Exit Ticket).

☐ Establish a common assessment calendar that includes data analysis meetings.

☐ Establish routines for monitoring students' responses to Tier 1–3 interventions.

☐ Help teachers establish routines for providing remediation and enrichment during instruction.

☐ Support teachers in ensuring that students have [accessible work](#) (e.g., graphic organizers, peer assistance, [assistive technology](#)).

☐ Provide professional learning and coaching support for flexible grouping.



## FLEXIBLE GROUPING: INVENTORY FOR ACTION For Teachers



### Putting It All Together

We've consolidated key practices, steps, and resources to help you get started on flexible grouping—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice, and where you might focus and prioritize your school’s next efforts.

#### PRACTICES OF FLEXIBLE GROUPING

#### POTENTIAL NEXT STEPS

**I plan opportunities for flexible grouping.**

- ☐ Design opportunities for collaboration during instruction. Balance homogeneous and heterogeneous opportunities.
- ☐ Design opportunities for reciprocal teaching.
- ☐ Use co-teaching opportunities and common planning sessions to capitalize on flexible grouping and best teaching methods.
- ☐ When you have support in your classroom from ELL or special education specialists, plan with these colleagues how to enhance flexible grouping instruction.
- ☐ Incorporate flexible grouping as part of planning integration of UDL into lessons.

**I communicate directions effectively and efficiently.**

- ☐ Establish group behavior expectations and/or student roles.
- ☐ Post directions in a central location and/or at small-group locations.
- ☐ Create visual representations and/or schedules to support students with language needs.

**Materials for learning are easily accessible.**

- ☐ Create a central location for small-group materials.
- ☐ Color-code folders or baskets.
- ☐ Assign a group member to be a materials manager.

**My classroom space is conducive to flexible grouping.**

- ☐ Arrange furniture so that there is a whole-group learning area and intentional areas for small-group work.
- ☐ Teach routines for transitioning into small-group work efficiently.

**I have efficient ways of collecting and analyzing student data.**

- ☐ Establish a practice of starting class with a Do Now and ending with an Exit Ticket.
- ☐ Implement [frequent checks for understanding](#) during instruction (e.g., choral response, whiteboards).
- ☐ Use your data to identify student successes or misconceptions and address during the following lessons.

**Assignments are created at varying levels based on student readiness, interest, and/or learner profile.**

- ☐ Review and implement the [Universal Design for Learning](#) framework.
- ☐ Implement evidence-based strategies like [CSR](#) or [PALS](#).

## FLEXIBLE GROUPING: SELF-REFLECTION



### Self-Assessment and Planning for Action

The purpose of this section is to support your reflection and conversation about possible next steps for flexible grouping in your school or classroom. Use the questions below to reflect on your current practice.

**How does my current practice align to the flexible grouping practices described in this section of the guide?**

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**What strategies do I want to begin implementing?**

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**Which resources presented in this guide will I use, and what professional organizations will I engage with further? (Review “Additional Resources” and “Inventory for Action” to support your next steps.)**

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**What additional support will I need to implement these strategies? Who in my school or district can support my development?**

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# IMPLEMENTING EFFECTIVE INSTRUCTIONAL PRACTICES



EXPLICIT INSTRUCTION



EVIDENCE-BASED



APPROACHES FOR READING AND MATH



STRATEGY INSTRUCTION

So far in this guide, you've explored two essential elements for creating an inclusive school that ensures that all students can thrive: establishing common beliefs throughout your school, and creating an inclusive schoolwide culture. But within these overarching conditions, your teachers also need to understand and use specific instructional practices to help drive student learning daily. These practices are especially important for students with learning and attention issues, who may learn and think differently from the ways teachers may have learned about in teacher preparation.

One important note of consideration as you explore this element of effective instructional practices: Although each of these sections discuss specific classroom practices, your role as the school leader as you grow the capacity of your team is to build out opportunities for the 1 in 5 across the whole school. As you read through the individual practices, consider smart and strategic staffing, as well as scheduling and grouping decisions you may be able to make across classrooms that allow your teachers to best meet the needs of individual students. If you're starting your implementation with a few strategically selected teachers before whole-school roll out, consider how those teachers may be able to serve students placed across multiple classes.

This section highlights specific, evidence-based instructional practices that have been shown to be effective with the 1 in 5 but that also lift instruction and learning for *all* kids. These include:



Explicit instruction



Evidence-based approaches for reading and math



Strategy instruction



# IMPLEMENTING EFFECTIVE INSTRUCTION: EXPLICIT INSTRUCTION

## EXPLICIT INSTRUCTION

### Setting the Table for Higher-Order Thinking

“When I look at my curriculum, I see that most of the content I teach assumes that the students coming into my classroom already have foundational skills or prior knowledge. More often than not, I find that assumption to be false. That can happen for a number of reasons. It could be that a student is coming from a different district or state with different learning standards. Or it could be that a student was exposed to a trauma in third grade and missed mastering that year’s content.

“Regardless of the reason, it’s my responsibility to give students the knowledge and strategies they need to access the grade-level curriculum. I can’t skip over content because I think that students should have already learned it. Without learning the foundations, my students won’t be ready for more rigorous skills like analysis or synthesis. Explicit instruction gives me an efficient and effective framework for helping all my students reach higher-order thinking skills.”

—A seventh-grade English language arts teacher in Washington, D.C.

“

“Critical-thinking skills and project-based learning are good goals for students. But for the 1 in 5, we have to prepare them for success. Explicit instruction can maximize students’ abilities to take away your instruction and give them the confidence and motivation to be successful on rigorous tasks.”

*Nathan Jones, Ph.D., Associate Professor of Special Education  
at Boston University*

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“Learning exists on a continuum, from explicit instruction to inquiry-based learning. Explicit instruction gives students the base and the scaffolding to engage with those higher-order thinking skills and concepts. It accelerates all students, but especially the 1 in 5.”

*Devin Kearns, Ph.D., Associate Professor of Special Education  
at the University of Connecticut*

## WHAT IT IS

### Defining Explicit Instruction

**Some students can generally make inferences from instruction.** If instruction isn’t clear or the teacher leaves out a direction for completing an assignment, they can intuit what they need to do to succeed, and they can persist through that ambiguity. But many students, including some with learning and attention issues, have trouble making that leap. That’s where explicit instruction comes in. It provides a framework for making lesson content crystal clear for students. Explicit instruction also supports students in becoming strategic thinkers by demystifying how to start and complete a task. So at its core, explicit instruction is a student-centered approach—one that’s especially useful for teachers in inclusive settings.

While explicit instruction has many attributes, here we boil it down to four core practices:

- Modeling with clear explanations
- Verbalizing the thinking process
- Providing practice opportunities
- Feedback

## IMPLEMENTING EFFECTIVE INSTRUCTION: EXPLICIT INSTRUCTION



### CORE IDEA #1

Explicit instruction is a **student-centered instructional approach** with four core practices: modeling with clear explanations; verbalizing the thinking process; providing practice opportunities; and feedback.

### WHY IT'S IMPORTANT

#### How Explicit Instruction Supports the 1 in 5 and All Students

**Explicit instruction** is a particularly effective instructional strategy to incorporate into the classroom because it supports all students, including those with learning and attention issues.<sup>40</sup> Specifically, the components (direct explanations, modeling, structured practice, and feedback) have been shown to be highly effective in increasing student achievement.<sup>41</sup> It's versatile too—explicit instruction has been shown to be effective for teaching both literacy and mathematics.<sup>42</sup>

**Explicit instruction** reduces the cognitive load that typical instruction places on learners. It's a way of scaffolding instruction for learners into smaller units (e.g., steps, skills, or concepts) to free up working memory, the cognitive system that holds information temporarily for processing. Learning new content places an intense demand on working memory.

In addition to its effectiveness for all students, explicit instruction has been shown to be effective for several populations of students:

- 1 English language learners (ELLs):** Explicit instruction pays dividends for English language learners, enabling the teacher to be intentional about making language accessible.<sup>43</sup> Explicit instruction is correlated to increased achievement gains among ELLs.
- 2 Learners with attention issues or language-based learning disabilities:** These learners may have difficulty attending to the most crucial ideas in a lesson. Explicit instruction is useful for cueing students in to the most essential information, which then sets them up for success.
- 3 Learners requiring intensive intervention:** Explicit instruction is also effective for learners who require intensive intervention. To demonstrate mastery of a skill, students with learning and attention issues frequently need 10 to 30 more practice opportunities than their peers. This level of structure—from instruction to practice—helps ensure that the 1 in 5 and all students are capable and confident enough to tackle higher-order skills.<sup>44</sup>

Think back to the seventh-grade teacher at the beginning of this section. Explicit instruction gives him an efficient way of reaching the many different types of learners in his room and addressing their needs.

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## IMPLEMENTING EFFECTIVE INSTRUCTION: EXPLICIT INSTRUCTION



### CORE IDEA #2

Explicit instruction works in inclusive general education settings and increases the achievement of students with and without learning and attention issues, including English language learners.

### WHAT IT LOOKS LIKE

#### Explicit Instruction in Action

If you're thinking that explicit instruction sounds a lot like the "I Do, We Do, You Do" model, you're right. Explicit instruction aligns well with this structure, but its purpose is to *intensify* instruction. Let's take a closer look at what that means. You can share the outline below with teachers to help them consider how explicit instruction would work in their classrooms.



#### FOR TEACHERS: What Explicit Instruction Looks Like in the Classroom

##### COMPONENT

##### EXPLANATION

###### Modeling with clear explanations

Effective modeling involves you explaining or demonstrating a skill or strategy to students in the same way they will practice the skill or strategy. Your language is clear, concise, and consistent. It focuses on the most critical aspects of the content you're teaching.

It might be necessary to model several times for students. To gauge whether that's necessary, check for student understanding frequently during your model. You might do this by asking students to solve a simple part of the model (e.g., an addition step while teaching the standard algorithm for multiplication).

###### Verbalizing the thinking process

As you are modeling, you are verbalizing the thinking process. Modeling self-talk and verbalizing your thinking is especially effective for supporting students with learning and attention issues, who often lack confidence and don't know how to begin a task. If your content can be broken down into "sticky" steps or a checklist, that's great, but the content won't always lend itself to this process.

###### Providing practice opportunities

Students need to practice to solidify their learning in their long-term memory. Explicit instruction involves both guided and independent practice, as well as cumulative review. Guided practice is your opportunity to ensure that students are ready for independent practice. It lets you work through several problems as a class, correcting errors as they occur, and maybe even re-modeling and re-verbalizing.

Once you observe students being successful, it's time to move on to independent practice, which is where the skill or strategy becomes fluent. Make sure that the independent practice is aligned to your instruction. Resist the urge to "trick" students with more difficult material. Students should achieve high mastery rates during independent practice (i.e., 90%).

Some students will need more opportunity to practice than others. In addition to practicing a new skill, students need cumulative review, in which they practice previously acquired and newly learned skills together. This review increases retention and automaticity.

###### Providing feedback

Guided practice and independent practice need to be coupled with immediate and actionable feedback, based on thoughtful assessment. Monitor your students throughout practice. If you see common errors happening, jump in to a whole-class reteach. Your quick response helps ensure high rates of success and reduces the likelihood of practice (and long-term) errors with a skill or strategy. This assessment of learning will also inform your next steps following the lesson. Instruction is more effective when targeted to the specific type of difficulty a student is facing.

## IMPLEMENTING EFFECTIVE INSTRUCTION: EXPLICIT INSTRUCTION



### DIVERSITY, EQUITY, AND INCLUSION CONNECTION

Explicit instruction gives struggling students who are typically left out of inquiry-based learning the information and skills they need to engage. Because students can struggle in multiple ways for multiple reasons, explicit instruction can provide equitable access regardless of any root cause or potential bias. Explicit instruction can be done in multiple ways (using visuals, reading, listening, etc.). It provides multiple entry points for student understanding.

## WHAT YOU MIGHT BE THINKING

### Common Questions and Challenges in Implementing Explicit Instruction

Explicit instruction can be a bit **controversial**, especially in schools that are heavily investing in inquiry-based practices and project-based learning. However, explicit instruction doesn't just support a wide variety of learners—it also helps make the higher-order thinking of these approaches more attainable and accessible.

To create truly inclusive classrooms, explicit instruction is a must-have tool in teachers' instructional toolbox. Here are some common questions and challenges you and your teachers may have as you consider how to integrate explicit instruction.

### CHALLENGE OR QUESTION

### INSIGHT AND TIPS FROM THE FIELD

**Doesn't explicit instruction lower rigor?**

No. Explicit instruction is the foundation on which higher-order thinking skills and inquiry-based learning can rest. Teachers are likely to use this strategy to introduce new material so that students have the information they need to optimize learning. Explicit instruction is an effective way to teach students the processes they need to meaningfully engage with inquiry-based learning.

**Explicit instruction seems like a set of instructional routines that need to be adhered to, where learning has to unfold by following a strict process.**

Explicit instruction is a set of *principles* for delivering instruction. The good news is that explicit instruction can be incorporated into current instructional practices.

**Explicit instruction isn't going to work for every skill. For instance, how could a teacher use explicit instruction to teach about the American motivations for entering into World War I?**

Teachers need to deploy explicit instruction thoughtfully—it may not be useful for *all* content or for *all* kids. Phonics instruction is a good example of a skill for which explicit instruction can be effective. If the teacher gives students specific information about letter-sound connections and opportunities to apply that knowledge to words and texts, students can do this when given texts to read themselves. Without this information, many students may not intuit how to break words into useful parts.

Just like any instructional approach, explicit instruction is not appropriate for every lesson. But for many skills or strategies, it helps students prepare for more difficult or more advanced content. For example, to analyze why the U.S. got into World War I, students need skills like how to read a textbook, how to separate important information from less critical information, how to structure information using graphic organizers, and so forth. All of these skills lend themselves to explicit instruction and lay the groundwork for thoughtful and rigorous analysis.



## IMPLEMENTING EFFECTIVE INSTRUCTION: EXPLICIT INSTRUCTION



### Stop and Jot

What do you perceive as the biggest barrier to explicit instruction in your school?  
What role can you play in overcoming it? Who can work with you on this?

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### RELATED PSEL 2015 STANDARD(S)<sup>45</sup> For the Success of Students With Disabilities

#### Standard 4: Curriculum, Instruction, and Assessment

*How effective principals meet the standard for the support of students with disabilities:*

- > Communicate high expectations for all students, including students with disabilities; promote high-quality, intellectually challenging curricula and instruction; and provide opportunities for students with disabilities to achieve within the general education curriculum using a multi-tier system of supports.
- > Work collaboratively with classroom teachers to help them develop their capacity for effective instruction.
- > Ensure that evidence-based approaches to instruction and assessment are implemented with integrity and are adapted to local needs.
- > Promote appropriate, clear, and valid monitoring and assessment systems where teachers receive meaningful information about how students respond to instruction and where information is relevant to instructional improvement.

### ADDITIONAL RESOURCES



Additional knowledge  
building



Self-assessment/  
implementation support



Turnkey professional  
development



Coaching conversations



Miscellaneous



#### To Be Clear: What Every Educator Needs to Know About Explicit Instruction (National Center on Intensive Intervention)

In this one-hour video webinar, experts Rebecca Zumeta Edmonds, Sarah Powell, and Devin Kearns:

- > Review the evidence base behind explicit instruction for students with disabilities
- > Highlight recently released course content designed to help educators learn how to deliver explicit instruction and review their current practices



#### Intensive Intervention Course: Features of Explicit Instruction (National Center on Intensive Intervention)

This course includes four learning modules that professional development providers can use in instructing preservice and inservice educators who are learning to implement explicit instruction.



#### High-Leverage Practice: Using Explicit Instruction (Council for Exceptional Children)

A 19-minute video designed to augment training/professional learning for using explicit instruction. The video:

- > Describes important steps
- > Shows how a variety of teachers implement the practice with all students, not just students with learning and attention issues



#### Elementary videos for Explicit Instruction: Effective and Efficient Teaching (ExplicitInstruction.org)

Eleven videos of expert Anita Archer modeling explicit instruction in grades K–3. An accompanying

45: Council of Chief State School Officers & Collaboration for Effective Educator Development, Accountability, and Support Center. (2017). [PSEL 2015 and promoting principal leadership for the success of students with disabilities](#). Washington, DC & Gainesville, FL: CCSSO and CEEDAR Center.

## IMPLEMENTING EFFECTIVE INSTRUCTION: EXPLICIT INSTRUCTION

video guide helps teachers analyze and critique each instructional practice. A few of the topics are:

- > Active participation instruction
- > Vocabulary instruction
- > Modeling recall



### **Secondary videos for *Explicit Instruction: Effective and Efficient Teaching* ([ExplicitInstruction.org](http://ExplicitInstruction.org))**

Nine videos of expert Anita Archer modeling explicit instruction in grades 4–8. An accompanying video guide helps teachers analyze and critique each instructional practice. A few of the topics are:

- > Geometry vocabulary review (grade 8)
- > Vocabulary and background knowledge frontloading (grade 5)
- > Pronunciation of multisyllabic passage words (grade 6)



### **Current Practice Alert: *Explicit Instruction in Math* ([TeachingLD.org](http://TeachingLD.org))**

A five-page, in-depth summary of the research base on the effectiveness of explicit instruction in math.



### **Council for Learning Disabilities**

An organization that promotes and disseminates evidence-based research and practices related to the education of individuals with learning disabilities.

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## PRIMARY CONTRIBUTORS

**Nathan Jones**, Ph.D., is an associate professor of special education at the Wheelock College of Education at Boston University.

**Devin M. Kearns**, Ph.D., is an associate professor of special education in the Department of Educational Psychology at the Neag School of Education at the University of Connecticut. He is also a research scientist for the Center for Behavioral Education and Research (CBER) and Haskins Laboratories.

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## EXPLICIT INSTRUCTION: INVENTORY FOR ACTION For School Leaders



### Putting It All Together

We've consolidated key practices, steps, and resources to help your school get started on explicit instruction—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice as a school leader, and where you might focus and prioritize your school's next efforts.

#### PRACTICES OF EXPLICIT INSTRUCTION

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**My school has established expectations for explicit instruction implementation.**

#### POTENTIAL NEXT STEPS

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- ☐ Further develop your understanding of how and when to implement explicit instruction and why it's essential for the 1 in 5. Check out [the self-paced learning modules series on the features of explicit instruction produced by the National Center on Intensive Intervention](#). The modules feature facilitation guides for using the materials with your instructional staff.

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**My school has tools for observing and coaching teachers on their implementation of explicit instruction.**

- ☐ [Incorporate a rubric](#) for observing explicit instruction to test for fidelity.

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**My school offers professional learning on explicit instruction.**

- ☐ Engage with your special education staff. Explicit instruction is a cornerstone of most special education teacher preparation programs, so these individuals can be tapped to support professional learning on the topic.
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## EXPLICIT INSTRUCTION: INVENTORY FOR ACTION For Teachers



### Putting It All Together

We've consolidated key practices, steps, and resources to help you get started on explicit instruction—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice, and where you might focus and prioritize your next efforts.

#### PRACTICES OF EXPLICIT INSTRUCTION

**I give clear explanations of content, which includes verbalizing my thinking.**

**I plan and execute multiple models that show all the steps and/or provide unique examples.**

**I use effective methods to elicit frequent learner responses.**

**I plan and execute guided practice opportunities.**

**I plan and execute independent practice opportunities.**

**I provide immediate and specific feedback to students.**

#### POTENTIAL NEXT STEPS

- ☐ Communicate content that matches your learning outcome.
- ☐ Plan explanations and models that are correct, clear, and concise.
- ☐ Plan models that show all the steps or provide unique examples.
- ☐ Script how you will verbalize your thinking.
- ☐ [Check out the National Center on Intensive Intervention's self-paced learning module on effective modeling](#) to deepen your practice.

- ☐ Plan and implement verbal responses (e.g., cold call, choral response).
- ☐ Plan and implement written responses (e.g., whiteboards, Stop and Jot).
- ☐ Plan and implement physical responses (e.g., “fist to five,” nonverbal signals).
- ☐ [Check out NCII's self-paced learning module on eliciting frequent responses](#) to deepen your practice.

- ☐ Design practice that is appropriate and aligned to the learning outcome.
- ☐ Design guided practice that is likely to produce high accuracy rates.
- ☐ Script prompts for guided practice.
- ☐ Check out [NCII's self-paced learning module on planning and implementing practice opportunities](#).

- ☐ Review expectations and resources before beginning independent practice.
- ☐ Design independent practice that allows students to work without support.
- ☐ Check out [NCII's self-paced learning module on planning and implementing practice opportunities](#).

- ☐ As students practice, circulate and observe every student's work.
- ☐ Provide immediate feedback when errors are made.
- ☐ Analyze student data and make strategic decisions about next steps.
- ☐ Check out [NCII's self-paced learning module on feedback](#).



## EXPLICIT INSTRUCTION: SELF-REFLECTION



### Self-Assessment and Planning for Action

The purpose of this section is to support your reflection and conversation about possible next steps for explicit instruction in your school or classroom. Use the questions below to reflect on your current practice.

How does my current practice align to the explicit instruction practices described in this section of the guide?

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What strategies do I want to begin implementing?

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Which resources presented in this guide will I use, and what professional organizations will I engage with further? (Review “Additional Resources” and “Inventory for Action” to support your next steps.)

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What additional support will I need to implement these strategies? Who in my school or district can support my development?

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# IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED READING INSTRUCTION

## 50 MINUTES

### That Can Unlock Reading Literacy

**Mr. Hsiao's first-grade students begin their afternoon reading block.** As a whole class, they move quickly through a letter-sound activity, reviewing previously learned consonant and vowel sounds before he introduces a new vowel team. Then, they practice reading both real and nonsense words using the new vowel team as well as previously learned vowel teams.

Soon, students transition into small-group reading work. Most student groups continue practicing phonics at centers, while one group meets with Mr. Hsiao at his small-group reading table. There, he administers a daily dose of reading intervention aligned to these students' fluency and comprehension needs.

After about 15 minutes of small-group work, Mr. Hsiao's students reconvene for a read-aloud on butterflies. He explicitly teaches the new vocabulary words to students to support their comprehension. During the read-aloud, he models how to self-monitor understanding of the text. Students engage in multiple Turn and Talks throughout the read-aloud.

Then, students transition to independent reading, and Mr. Hsiao splits his time between conferencing with individual students and meeting with a strategy group focused on reading fluency. Within about 50 minutes, Mr. Hsiao has provided his students with explicit and systematic teaching on all five components of reading.

“

“Evidence-based reading instruction targets students who are struggling readers. But do all students benefit from this approach? Absolutely.”

*Margie Gillis, Ed.D., President and Founder of Literacy How*

“

“Reading is a social justice issue; as a teacher, you change pathways. You cannot leave this to chance—you control the issue of teaching reading effectively to your students.”

*Nicole Patton Terry, Ph.D., Olive and Manuel Bordas Professor of Education in the School of Teacher Education and Associate Director of the Florida Center for Reading Research at Florida State University*

## WHAT IT IS

### Defining Evidence-Based Reading Instruction

**Many people talk about using evidence-based strategies.** But what does that really mean? The federal Every Student Succeeds Act (ESSA) defines **evidence-based** programs as any “activity, strategy, or intervention that **shows a statistically significant effect on improving student outcomes or other relevant outcomes.**” In Section 8101(21)(A), ESSA defines four levels of evidence:

- > Strong (from one or more well-designed and well-implemented experimental studies)
- > Moderate (from one or more well-designed and well-implemented quasi-experimental studies)
- > Promising (from one or more well-designed and well-implemented correlational studies)
- > Demonstrating a rationale (based on high-quality research findings or positive evaluation) that such activity, strategy, or intervention is likely to improve student outcomes or other relevant outcomes<sup>46</sup>

46: National Center on Improving Literacy. (2018). [What do we mean by evidence-based?](#) Washington, DC: U.S. Department of Education.

## IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED READING INSTRUCTION

The strategies for reading instruction (both content and methods) included in this guide have been thoroughly vetted for effectiveness in the classroom. They are endorsed by the [National Reading Panel](#) and the [International Dyslexia Association](#) as effective for improving outcomes for all students.

### WHY IT'S IMPORTANT

#### How Evidence-Based Reading Instruction Supports the 1 in 5 and All Students

**Effective reading instruction is essential for all students.** A national study found that students who don't read proficiently by third grade are four times more likely to not earn a high school diploma than their proficient peers.<sup>47</sup> And 85 percent of juveniles involved with the juvenile court system lack many literacy skills.<sup>48</sup> Evidence-based reading instruction is an issue that applies to all students.

Research shows that when educators use evidence-based instructional strategies that support students with learning and attention issues, *all* students benefit. For example, new studies show that when general educators explicitly teach phonics, reading proficiency rates improve greatly for all students. In one district, student proficiency increased from 47 percent to 84 percent after teachers taught their students using these strategies.<sup>49</sup> In another recent study of fourth- and fifth-grade reading instruction in which teachers used an explicit reading strategy called Collaborative Strategic Reading, students both with and without learning disabilities improved their reading comprehension skills.<sup>50</sup>

Studies on the effectiveness of [evidence-based reading instruction for the 1 in 5](#) have shown particular benefits. For example, students with dyslexia (a specific learning disability that's characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities) often have significant difficulties in phonemic awareness. They greatly benefit from receiving intervention in this area.<sup>51</sup> Students with language-based learning disabilities have needs beyond phonology that require intervention in the area of reading comprehension.

Evidence-based reading instruction has also been shown to be effective and essential for English language learners (ELLs). [ELLs may need additional support with vocabulary](#), both in the general classroom and through interventions, because of lack of exposure to English and/or academic domain language.<sup>52</sup> They may also require additional support in reading comprehension, particularly in content areas like science or social studies. Beyond vocabulary instruction, teachers of ELLs can [support their students' comprehension needs](#) by building background knowledge and frequent checks for understanding.



#### CORE IDEA #1

When teachers use evidence-based reading instruction, *all* students benefit.

47: Annie E. Casey Foundation. (2012). [Double jeopardy: How third grade reading skills and poverty influence high school graduation](#). Baltimore, MD: Annie E. Casey Foundation.

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## WHAT IT LOOKS LIKE

### Evidence-Based Reading Instruction in Action

In evidence-based reading instruction, your school should consider two major areas:

- > What we teach
- > How we teach

### > What Should We Teach?

One of the most respected studies of reading was conducted by the [National Reading Panel](#), which identified five components of content for comprehensive reading instruction. While the table below is not comprehensive, it can give you a reference that will help you assess schoolwide practices in your school. And by sharing it with teachers in your school, you can also help them reflect on how their own practices align with these expert recommendations.

#### National Reading Panel: 5 Components of Effective Reading Instruction

##### COMPONENT

##### EXAMPLES OF STRATEGIES

###### Phonemic awareness:

*The understanding of and the ability to manipulate phonemes (i.e., individual sounds) in spoken words*

- > Explicitly teach the 44 unique phonemes in the English language and how they are produced (i.e., articulated).
- > Teach students to [segment](#), [blend](#), and manipulate the sounds in words.
- > Teach students [letter-sound correspondence](#).
- > Use word-building and other activities to link students' knowledge of [letter-sound relationships](#) with phonemic awareness.
- > Provide students with [whisper phones](#) to help them identify the sounds their voices make when they pronounce words.

###### Phonics:

*The ability to use letter-sound correspondences and syllable patterns to decode words*

- > Use keywords with pictures to associate sounds (phonemes) with letters (e.g., b-bat-/b/).
- > Teach short vowels first before introducing other vowel sounds.
- > [Teach students to blend](#) letter sounds and sound-spelling patterns from left to right within a word to produce a recognizable pronunciation.
- > Instruct students in common sound-spelling patterns.
- > Teach students to recognize common word parts (e.g., -old, -ind, -igh, -ould, etc.).
- > Have students read decodable words in isolation and in connected text.
- > Teach the difference between regular and irregular high-frequency words so that students can recognize them efficiently.
- > Explain what is irregular about some high-frequency words that are essential to the meaning of the text (e.g., the vowel team in *said* has the short /e/ sound).

###### Fluency:

*The ability to read a text with sufficient speed, accuracy, and expression to support reading comprehension*

- > Teach "scooping" groups of three to five words in connected text that are grammatically related (e.g., "under the tree," "a furry brown dog").
- > Implement [timed repeated reading](#).
- > Provide opportunities for oral reading practice with feedback to develop fluent and accurate reading with expression.



## IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED READING INSTRUCTION

### Vocabulary:

*The understanding of words and their meanings to support reading comprehension*

- > Explicitly teach prefixes, suffixes, and root words, including Greek and Latin roots.<sup>53</sup>
- > Use [word maps](#) to provide a visual support for learning new words.
- > Teach academic vocabulary (e.g., words that are specific to the science domain) in the context of other reading activities.
- > Use student-friendly definitions.
- > Provide examples and non-examples of new words.

### Comprehension:

*The ability to make meaning of a text*

- > Explicitly engage students in developing narrative language skills.
- > Teach students to self-monitor their understanding of the text and to self-correct word-reading errors.
- > Activate prior knowledge.<sup>54</sup>
- > Activate vocabulary knowledge.
- > Engage students in conversations that support the use and comprehension of inferential language.
- > Teach knowledge of text and sentence structure.
- > Implement peer learning strategies like [reciprocal teaching](#).
- > Teach students to summarize what they read by [retelling](#) or [paragraph shrinking](#).

In the years since the National Reading Panel study, another component of reading that has been shown to have a positive impact on reading comprehension is knowledge of morphology, or how smaller meaningful parts (like prefixes and suffixes) combine to build words. Knowledge of morphology contributes to vocabulary growth, reading fluency, accuracy in spelling, and understanding of the writing system. It's most influential for students in upper elementary, middle, and high school.<sup>55</sup>



### CORE IDEA #2

The key to literacy instruction is the explicit and systematic teaching of ALL essential subskills: phonemic awareness, phonics, vocabulary, fluency, and comprehension, as well as writing.

### > How Should We Teach?

The evidence supports *explicit* and *systematic* teaching of the foundational reading skills identified by the National Reading Panel.

*Explicit* means clearly explaining and modeling key skills, coupled with purposeful examples. In other words, you can't expect a student to learn vowel sounds through osmosis or exposure.

*Systematic* refers to using a planned scope and sequence of skills and pacing, in which prerequisite skills are taught and mastered before students move on to the next skill. Skills are ordered intentionally to avoid confusing students (e.g., the letters *b* and *p* would not be taught together).

53: Rivera, M. O., Moughamian, A. C., Lesaux, N. K., & Francis, D. J. (2008). [Language and reading interventions for English language learners and English language learners with disabilities](#). Portsmouth, NH: RMC Research Corporation, Center on Instruction.

54: Ibid.

55: Nagy, W., Berninger, V. W., & Abbott, R. D. (2006). Contributions of morphology beyond phonology to literacy outcomes of upper elementary and middle-school students. *Journal of Educational Psychology*, 98(1), 134–147.

## IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED READING INSTRUCTION

The International Dyslexia Association (IDA) says that Structured Literacy instruction is the best approach to address learner variability in inclusive settings. Its elements of instruction work both for students with dyslexia and for all readers. Structured Literacy instruction is:

- Systematic and cumulative
- Explicit
- Informed by individual student data

In addition, teachers should use data to drive success and outcomes for students. Teachers begin by [screening students](#) and [continually monitoring their progress](#). Student data informs instruction and helps identify students who are not responding to core instruction so that they can receive more targeted intervention. It's crucial to integrate data analysis and progress monitoring throughout instruction.

And finally, schools should use [UDL](#) to give all students equal access to reading instruction. Equity of access for the 1 in 5, English language learners, and all students depends on teachers providing:

- Information presented in multiple ways
- Multiple ways for students to demonstrate, practice, and maintain skills
- Intentional scaffolding, relevancy, and student choice (see the “Explicit Instruction,” “Universal Design for Learning,” and “Culturally Responsive Teaching” sections of this guide)
- Targeted corrective feedback



### DIVERSITY, EQUITY, AND INCLUSION CONNECTION

[Culturally responsive literacy instruction](#) is instruction that bridges the gap between the school and the world of the student, is consistent with the values of the students' own culture, is aimed at ensuring academic learning, and encourages teachers to adapt their instruction to meet the learning needs of all students.

[Culturally responsive literacy](#) instruction is essential to [equity](#) in the classroom—ensuring that culturally and linguistically diverse students have an inclusive setting that includes high expectations, exposure to academically rich curricula and materials, culturally and linguistically responsive and appropriate approaches, instructional technologies that enhance learning, and emphasis on student-regulated, active learning rather than passive, teacher-directed transmission.

## WHAT YOU MIGHT BE THINKING

### Common Questions and Challenges in Implementing Evidence-Based Reading Instruction

If your school is not currently using all the components of evidence-based reading instruction, considering these components may raise a lot of questions. “Does this mean I have to throw out my literacy curriculum?” Take a deep breath. Evidence-based instruction can be layered over your mandated state or district literacy curriculum.

Here are some common questions and challenges that you and your teachers may have as you consider making your reading instruction more evidence-based.

### CHALLENGE OR QUESTION

This is describing a way of teaching reading that conflicts with what teachers in our school currently do and/or what they learned in teacher preparation programs.

### INSIGHT AND TIPS FROM THE FIELD

That's a common feeling. Unfortunately, despite the evidence supporting these practices, many general education teacher preparation programs do not expose their teacher candidates to these practices. It's important to remember that these strategies not only work for students with learning and attention issues, including dyslexia, but also accelerate the growth of *all* learners. Start by learning about a component of reading that students in your school or classroom struggle with most, and build from there.

What do I do about the state standards our school has to meet?

The approaches here align to state standards, so you can use them to help students meet those standards.



## IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED READING INSTRUCTION

**We don't have time in our literacy instructional block to address all of these components.**

As the example of Mr. Hsiao at the beginning of this section shows, it's not easy to find enough time—but it is possible with planning and organization. Teachers might start by incorporating small-group instruction aligned to student needs—e.g., implementing small-group instruction like Collaborative Strategic Reading or Peer-Assisted Learning Strategies to support struggling readers. They can find more information on these strategies in the section of the guide devoted to flexible grouping.

**How can I get buy-in from content-area teachers and make sure that they include evidence-based reading instruction in their teaching?**

Content-area teachers are responsible for ensuring that their students learn the skills and concepts in their content area. A content-area teacher would not expect a student to master a concept without first teaching the student the content-area skills necessary for the student to do the work, solve the problem, or make sense of the information. Similarly, any teacher who relies on students reading to acquire the knowledge or understanding they are responsible for teaching has an obligation to use evidence-based reading practices. This gives all students the best opportunity to meet content-area expectations.



### Stop and Jot

What do you perceive as the biggest barrier to evidence-based reading instruction in your school?  
What role can you play in overcoming it? Who can work with you on this?

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### RELATED PSEL 2015 STANDARD(S)<sup>56</sup> For the Success of Students With Disabilities


#### Standard 4: Curriculum, Instruction, and Assessment

*How effective principals meet the standard for the support of students with disabilities:*

- > Communicate high expectations for all students, including students with disabilities; promote high-quality, intellectually challenging curricula and instruction; and provide opportunities for students with disabilities to achieve within the general education curriculum using a multi-tier system of supports.
- > Work collaboratively with classroom teachers to help them develop their capacity for effective instruction.
- > Ensure that evidence-based approaches to instruction and assessment are implemented with integrity and are adapted to local needs.
- > Promote appropriate, clear, and valid monitoring and assessment systems where teachers receive meaningful information about how students respond to instruction and where information is relevant to instructional improvement.

#### ADDITIONAL RESOURCES

 Additional knowledge building

 Self-assessment/ implementation support

 Turnkey professional development

 Coaching conversations

 Miscellaneous



#### AIM Pathways Interactive Digital Teacher Training Platform

AIM PATHWAYS™ is a research-driven, digitally-delivered learning tool that teachers can learn, practice, and apply in their classrooms. The Pathways to Proficient Reading course has received accreditation from the International Dyslexia Association for its alignment to the IDA's Knowledge and Practice Standards for Teachers of Reading.



#### Current Practice Alert: Reading Comprehension Strategy Instruction (TeachingLD.org)

A five-page alert that discusses what reading comprehension is and how Comprehension Strategy Instruction (CSI) can help students who have trouble developing a coherent understanding of material that is read. Describes principles of CSI throughout the grades.



#### International Dyslexia Association's Knowledge and Practice Standards

Standards published by IDA in 2010 and updated in 2018, which are intended to create consistency and quality in how schools teach reading to individuals with dyslexia and other struggling readers.



#### Secondary Reading Instruction (Part 1): Teaching Vocabulary and Comprehension in the Content Areas (IRIS Center)

A 90-minute interactive, multimedia learning module that teachers can use to understand how to incorporate vocabulary and reading comprehension skills into content-area lessons—for example, teaching students to:

- > Activate prior knowledge
- > Monitor comprehension
- > Use graphic organizers



#### Secondary Reading Instruction (Part 2): Deepening Middle School Content-Area Learning With Vocabulary and Comprehension Strategies (IRIS Center)

Follow-up to Part 1, a 90-minute interactive, multimedia learning module helps teachers understand some of the reasons that adolescents struggle with content-area text. It offers additional effective strategies to improve students' vocabulary and comprehension skills.



#### Collaborative Strategic Reading (CSR): Improving Secondary Students' Reading Comprehension Skills (National Center on Secondary Education and Transition)

An eight-page brief that describes CSR, a reading comprehension practice for secondary students. It consists of four strategies that students apply before, during, and after instruction in small cooperative groups:

- > Preview
- > Click and clunk
- > Get the gist
- > Wrap up

56: Council of Chief State School Officers & Collaboration for Effective Educator Development, Accountability, and Support Center. (2017). [PSEL 2015 and promoting principal leadership for the success of students with disabilities](#). Washington, DC & Gainesville, FL: CCSSO and CEEDAR Center.

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## IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED READING INSTRUCTION



### **Lindamood–Bell Program: What You Need to Know ([Understood.org](#))**

Describes the Lindamood–Bell program for struggling readers, which uses the different senses to help students make connections between sounds, letters, and words.



### **Literacy How**

A nonprofit that specializes in translating “gold standard” literacy research into practice at all levels, with a particular emphasis on Pre–K–3. Provides teachers and administrators with PD in all areas of literacy instruction. You can watch videos of evidence-based literacy instruction on their [YouTube channel](#).



### **Orton–Gillingham: What You Need to Know ([Understood.org](#))**

Describes the first teaching approach specifically designed to help struggling readers by explicitly teaching the connections between letters and sounds.



### **Reading Rockets**

Website providing free resources about teaching children to read and helping students who struggle. Offers hundreds of articles on teaching reading, classroom strategies, in-classroom videos, parent tips in 11 languages, video interviews with top children’s book authors, a daily news service, and more.



### **Current Practice Alert: Self-Regulated Strategy Development for Writing (SRSD)**

A four-page description of the research base for this empirically validated model for supporting students as they compose text by helping them develop relevant cognitive and self-regulation skills.



### **Wilson Reading System: What You Need to Know ([Understood.org](#))**

Describes an instructional program that uses a highly structured approach to help readers who have difficulties with word recognition and spelling. WRS, designed for students from second grade to adulthood, is one of only a few reading programs with materials specifically designed for adolescents.

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## PRIMARY CONTRIBUTORS

**Margie Gillis**, Ed.D., is the founder and president of Literacy How.

**Nicole Patton Terry**, Ph.D., is the Olive and Manuel Bordas Professor of Education in the School of Teacher Education and Associate Director of the Florida Center for Reading Research at the Florida State University.

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## EVIDENCE-BASED READING INSTRUCTION: INVENTORY FOR ACTION For School Leaders



### Putting It All Together

We've consolidated key practices, steps, and resources to help your school get started on evidence-based reading instruction—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice as a school leader, and where you might focus and prioritize your school's next efforts.

#### PRACTICES OF EVIDENCE-BASED READING INSTRUCTION

My school has a vision statement for its approach to literacy.

My school has a comprehensive literacy plan (i.e., a strategic plan for implementing and improving evidence-based literacy instruction).

My school uses evidence-based reading practices, and/or our reading curriculum is aligned to the best practices.

My school uses a multi-tier system of supports approach to support all learners.

My school provides teacher observation and feedback based on teachers' effective use of evidence-based practices.

My school offers PD to all staff members on evidence-based reading practices.

My school actively engages families and caregivers in supporting students' reading literacy.

#### POTENTIAL NEXT STEPS

☐ Conduct a [literacy scan](#) to self-assess your school or district's current literacy practices. This comprehensive resource will prompt you to create a vision statement, a literacy plan, aligned scheduling, and so forth.

☐ Invest in [evidence-based reading programs](#) for struggling readers.

☐ Conduct a self-study of your school's implementation of [early literacy interventions](#).

☐ Conduct a self-study of your school's implementation of [interventions in grades 3–8](#).

☐ Use the [tools here](#) to develop your leadership team's approach to literacy.

☐ Learn more about [MTSS](#).

☐ Use a [Principal Walk-Through checklist](#) to effectively structure classroom visits in order to observe effective reading instruction.

☐ Explore the “Additional Resources” section to find tools for staff PD.

☐ Invite families into classrooms for literacy celebrations.

☐ Provide families with [resources](#) to support their child's reading at home.



## EVIDENCE-BASED READING INSTRUCTION: INVENTORY FOR ACTION For Teachers



### Putting It All Together

We've consolidated key practices, steps, and resources to help your school get started on evidence-based reading instruction—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice as a school leader, and where you might focus and prioritize your school's next efforts.

#### PRACTICES OF EVIDENCE-BASED READING INSTRUCTION

I use evidence-based practices to teach phonemic awareness.

I use evidence-based practices to teach phonics.

I use evidence-based practices to teach fluency.

I use evidence-based practices to teach vocabulary.

I use evidence-based practices to teach comprehension.

#### POTENTIAL NEXT STEPS

☐ Reflect on and improve your phonemic awareness instruction by [exploring the strategies here](#).

☐ Review these [rules of phonics](#).  
☐ Reflect on and improve your phonics instruction by [exploring the strategies here](#).

☐ Reflect on and improve your fluency instruction by [exploring the strategies here](#).

☐ Reflect on and improve your vocabulary instruction by [exploring the strategies here](#).

☐ Reflect on and improve your comprehension instruction by [exploring the strategies here](#).  
☐ Implement [Collaborative Strategic Reading](#).

## EVIDENCE-BASED READING INSTRUCTION: SELF-REFLECTION



### Self-Assessment and Planning for Action

The purpose of this section is to support your reflection and conversation about possible next steps for evidence-based reading instruction in your school or classroom. Use the questions below to reflect on your current practice.

How does my current use of evidence-based reading instruction align to the descriptions in this guide?

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What strategies do I want to begin implementing?

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Which resources presented in this guide will I use, and what professional organizations will I engage with further? (Review “Additional Resources” and “Inventory for Action” to support your next steps.)

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What additional support will I need to implement these strategies? Who in my school or district can support my development?

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# IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED MATH INSTRUCTION



## DEBUNKING

### “I’m Just Not a Math Person”

“**I actually hated math as a student**—I just never thought I was any good at it and I had to work really hard in those classes. Language arts, science, and social studies came really easy to me,” laughs Ms. Bowen, a second-grade teacher. “But it’s my favorite subject to teach after I spent time learning about evidence-based practices and addressed my own math anxiety head-on with a math whiz of a colleague.”

Ms. Bowen has about an hour to teach math every day in her classroom. Her lessons often begin with cumulative review connected to the day’s lesson. She leverages [explicit instruction](#) to break down new content into sticky steps for students to follow. She has also taught her students flexible thinking—multiple ways to approach word problems so that students understand that math problems can often be solved in more than one way. Students’ favorite time of class is toward the end when Ms. Bowen calls them to the whole-group space to debrief their independent practice using “math talk.” Students get the chance to showcase their problem-solving skills and applaud one another for the different strategies they used to arrive at their responses.

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“Some students have anxiety about math. They need to experience math instruction in a nonthreatening way in order to be successful. These practices can minimize those feelings.”

*Daniel Ansari, Ph.D., Professor in the Department of Psychology at the University of Western Ontario in Canada and Head of the Numerical Cognition Laboratory*

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“When teachers create an environment where hard work and perseverance are acceptable routes to problem-solving, students may view their effort as a marker of their success rather than of a learning disability. This promotes the message that mathematics learning is achievable with effort, and that the need to put forth effort does not imply lack of ability. This principle applies to all grade levels, Pre-K to high school. It may be especially important for children who need to exert much effort, including children with mathematics learning difficulties and disabilities.”

*Michèle Mazzocco, Ph.D., Professor at the Institute of Child Development at the University of Minnesota and Director of the Early Math and Numeracy Lab*

## WHAT IT IS

### Defining Evidence-Based Math Instruction

**As a school leader**, you’ve probably heard teachers like Ms. Bowen say, “I’m just not a math person.” You may have heard the same thing from students—you may even have said it yourself! The good news is that there are really effective ways to teach math that are rooted in evidence. These strategies can be applied to your school’s existing math curriculum to meet the varied learning needs of students and to make your instruction more effective for all learners, including the 1 in 5. In this section, we look at some strategies that are strongly supported by research and practice:



## IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED MATH INSTRUCTION

- Explicit instruction with cumulative practice
- Visual representations
- Schema-based instruction
- Peer interaction



### CORE IDEA #1

You can make your existing math curriculum more effective for all learners by adjusting how you introduce content and what kind of practice opportunities you provide for students.

## WHY IT'S IMPORTANT

### How Evidence-Based Math Instruction Supports the 1 in 5 and All Students

It's estimated that 25 to 35 percent of students struggle with math<sup>57</sup> and 5 to 8 percent have significant challenges.<sup>58</sup> Yet, [dyscalculia](#) (a specific learning issue that affects students' ability to understand number-related concepts or use symbols or functions) has one of the lowest rates of research compared with other neurodevelopmental disorders, with 17 times more National Institutes of Health funding targeting dyslexia research than dyscalculia research.<sup>59</sup>

Math difficulties happen for many different reasons, including learning issues with language processing, co-occurring reading issues, executive functioning challenges, and differences in visual/spatial reasoning. It's important for educators to understand the potential underlying reasons for math difficulties so that they can be more sensitive to those students' needs and consider which evidence-based strategies might be most appropriate.



### DIVERSITY, EQUITY, AND INCLUSION CONNECTION

The [impact of unconscious bias of race and gender in mathematics classrooms](#) contributes to the underrepresentation of these groups in STEM fields. In the lower grades, this can affect student admission into advanced academic tracks and can lead to underrepresentation in postsecondary employment in these fields.

Ultimately, a strong math foundation is critical for the 1 in 5 as well as for English language learners. It opens doors to higher-level math courses and STEM careers,<sup>60</sup> both areas in which these two groups of students are underrepresented. That's why it's so important for school leaders and teachers to understand the [evidence-based math instructional strategies](#) that can boost all students' confidence and competence in math.

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## IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED MATH INSTRUCTION



### CORE IDEA #2

Students can struggle with mathematics for many different reasons. Using evidence-based math instructional strategies can boost students' confidence and their feelings of competence in math.

### WHAT IT LOOKS LIKE

#### Evidence-Based Math Instruction in Action

Here are some strategies that have been found to be effective for teaching math skills to the 1 in 5 and all students. When choosing and using these strategies, you should keep in mind that what is most effective for one student may not be most effective for another. Use this list to deepen your own understanding, and pass it on to your teachers to help them reflect on their instructional practices in math.

#### **PRACTICE: Explicit instruction with cumulative practice**

[Explicit instruction](#), as you read earlier in this guide, is an evidence-based method for delivering instruction that makes the learning process apparent and clear through modeling, verbalizing the thinking process, practice opportunities, and immediate feedback. It is structured and systematic. During explicit instruction, the teacher provides supports and scaffolds so that learners are guided through learning the new skill.<sup>61</sup>

Teaching mathematics this way is a highly effective strategy<sup>62</sup> and can improve students' ability to perform operations and solve word problems. A key component of explicit instruction is cumulative practice and repetition, which supports students' ability to quickly retrieve information. The right amount of repetition will likely vary across students, and may vary over time for the same individual. But cumulative review is critical for maintaining fluency and proficiency with facts.

One example of cumulative practice is to incorporate previously learned facts into practice activities. Teachers can individualize practice problems so students learn one or two new facts, but also practice recently acquired facts *and* review previously acquired content. [Opportunities for math games](#) during the math block can also promote cumulative practice in a nonthreatening environment. Not only do math games promote the idea that math can be fun, they can also decrease the anxiety many students feel about math.

#### **PRACTICE: Visual representations**

[Visual representations](#) can help bilingual English language learners and the 1 in 5 specifically because they remove language barriers and support processing of abstract math concepts and problem-solving. When students use accurate visual representations to solve math problems,<sup>63</sup> including word problems,<sup>64</sup> they are more likely to solve the problems correctly.

Common visual representations include number lines, tape diagrams, pictures, graphs, and graphic organizers. (Note: For students whose mathematics difficulties are related to difficulties in spatial reasoning or visualization, this strategy may not be as useful.)

In some cases, teachers may first need to teach a concept using concrete manipulatives (e.g., base

61: Archer, A. L., & Hughes, C. A. (2011). *Explicit instruction: Effective and efficient teaching*. New York, NY: Guilford Press.

62: Gersten, R., Ferrini-Mundy, J., Benbow, C., et al. (2008). *Report of the task group on instructional practices* ([National Mathematics Advisory Panel](#)). Washington, DC: U.S. Department of Education.

63: Boonen, A. J., van Wesel, F., Jolles, J., & van der Schoot, M. (2014). The role of visual representation type, spatial ability, and reading comprehension in word problem solving: An item-level analysis in elementary school children. *International Journal of Educational Research*, 68, 15–26.

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## IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED MATH INSTRUCTION

10 blocks, Unifix cubes). This strategy, although more commonly used in elementary classrooms, can also help older students accelerate their ability to apply new understanding to visuals and finally to the abstract.

[Concrete to representational/pictorial to abstract \(CR/PA\)](#) is a three-step instructional approach that is often used to teach math concepts. Developing a concrete understanding of the math concept/skill first helps some students master the concept/skill and then perform at the abstract level.

### PRACTICE: Schema-based instruction

Schema-based instruction<sup>65</sup> guides students in identifying word problem patterns, representing them accurately, and then selecting an effective method for [problem-solving](#). The two main types of schemas are additive and multiplicative. Additive refers to addition and subtraction problems. Multiplicative refers to multiplication and division problems. After students identify the key features of a word problem, they represent the information using a diagram or an equation before solving.

SCHEMA TYPE	PROBLEM	VISUAL REPRESENTATION
Additive—Difference	Steven has 2 more pens than Kiara. Steven has 8 pens. How many pencils does Kiara have?	$8 - \bigcirc = \bigcirc 2$
Multiplicative—Equal Groups	Tyler has 5 bags of apples. There are 3 apples in each bag. How many apples does Tyler have?	$5 \times 3 = \bigcirc$

### PRACTICE: Peer interactions

Student discussion helps students express their reasoning and become more aware of problem-solving processes. The practice also helps support the development of conceptual understanding.

One way to facilitate peer interactions is through [classwide peer tutoring](#), in which teachers intentionally pair students—for example, by equal ability, divergent strengths and needs, etc. Students struggling in math may find this routine helpful because peers can provide different explanations or clarify a process.

Debriefing at the end of independent practice is another peer interaction strategy. It promotes the development of math language as students explain to each other the strategies they used to complete the learning target. Students benefit from peer explanations and from seeing a variety of ways to solve the same problem. Effective math discussion requires the teacher to teach discussion procedures and establish behavioral expectations. Teachers may also create prompts to support discussion (e.g., “What can you add to Alex’s explanation?”).

## WHEN UNIVERSAL MATH INSTRUCTION ISN’T ENOUGH: PRACTICAL RECOMMENDATIONS

What happens when students are not responding to evidence-based universal math instruction? At that point, it’s time to intensify instruction using interventions. The following recommendations for supporting students struggling in mathematics are summarized from the [Institute of Education Sciences’ What Works Clearinghouse practice guide](#). Use these recommendations to deepen your own understanding, and share them with teachers as a quick PD tool.

65: Jitendra, A. K., Harwell, M. R., Karl, S. R., et al. (2016). Schema-based instruction: Effects of experienced and novice teacher implementers on seventh grade students’ proportional problem solving. *Learning and Instruction*, 44, 53–64; Jitendra, A. K., Peterson-Brown, S., Lein, A. E., et al. (2015). Teaching mathematical word problem solving: The quality of evidence for strategy instruction priming the problem structure. *Journal of Learning Disabilities*, 48(1), 51–72; Jitendra, A. K., Star, J. R., Starosta, K., et al. (2009). Improving seventh grade students’ learning of ratio and proportion: The role of schema-based instruction. *Contemporary Educational Psychology*, 34(3), 250–264; Montague, M., & Dietz, S. (2009). Evaluating the evidence base for cognitive strategy instruction and mathematical problem solving. *Exceptional Children*, 75(3), 285–302; Fuchs, L. S., Powell, S. R., Seethaler, S. M., et al. (2010). [The effects of strategic counting instruction, with and without deliberate practice, on number combination skill among students with mathematics difficulties](#). *PMC*, 20(2), 89–100.



## IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED MATH INSTRUCTION



### FOR TEACHERS: HOW TO USE SUCCESSFUL MATH INTERVENTIONS

#### RECOMMENDATION

#### IN PRACTICE

**Screen all students** to identify those at risk for potential mathematics difficulties and respond with evidence-based interventions.

- ☐ Screen students at the beginning and middle of the year.
- ☐ Select screening measures based on the content they cover, with an emphasis on critical instructional objectives for each grade.
- ☐ In grades 4–8, use screening data in combination with state testing results.

**Focus intervention materials on in-depth treatment of whole numbers in kindergarten through grade 5 and on rational numbers in grades 4–8.**

- ☐ For students in grades K–5, interventions should focus almost exclusively on properties of whole numbers and operations.
- ☐ For students in grades 4–8, interventions should focus on in-depth coverage of rational numbers as well as advanced topics in whole number arithmetic (e.g., long division).

**Make instruction during the intervention explicit and systematic.**

- ☐ Follow the steps to implementing explicit instruction.
- ☐ Provide models of proficient problem-solving, verbalization of thought processes, guided practice, corrective feedback, and frequent cumulative review.
- ☐ Provide students with opportunities to solve problems in a group and share their problem-solving strategies.
- ☐ Include cumulative review in each session.

**Include instruction on solving word problems that is based on common underlying structures.**

- ☐ Explicitly teach students about the structure of various problem types, how to categorize problems based on structure, and how to determine appropriate solutions for each problem type.
- ☐ Explicitly teach how to recognize the common underlying structure between familiar and unfamiliar problems and to transfer known solution methods from familiar to unfamiliar problems.

**Include opportunities for students to work with visual representations of mathematical ideas.**

- ☐ Use visual representations such as number lines, arrays, and strip diagrams.
- ☐ Use concrete manipulatives. Although this can also be done with students in upper elementary and middle school grades, keep the use of manipulatives with older students efficient because the goal is to move from concrete manipulatives to visual representations and finally to the abstract. Be mindful that the manipulatives are not too distracting or realistic, as this feature seems to reduce their effectiveness.

**At all grade levels, devote time in each intervention session to building fluent retrieval of basic facts.**

- ☐ Provide about 10 minutes per session of instruction to build quick retrieval of basic number combinations. Consider using technology, flash cards, and other materials to vary the practice and to provide extensive practice to facilitate automatic retrieval.
- ☐ For students in grades K–2, explicitly teach strategies for efficient counting to improve the retrieval of math facts.
- ☐ Teach students in grades 2–8 how to use their knowledge of properties (e.g., commutative, associative, and distributive laws) to recall facts in their heads.

**Embed motivation strategies within interventions.**

- ☐ Reinforce or praise students for their effort and for attending to and being engaged in the lesson.
- ☐ Consider rewarding student accomplishments.
- ☐ Allow students to chart their progress and to set goals for improvement.

**Monitor students' response to intervention and make data-based decisions on next steps.**

- ☐ Monitor the progress of students at least once a month.
- ☐ Use curriculum-embedded assessments in interventions to determine whether students are learning from the intervention.
- ☐ Use progress monitoring data to regroup students as necessary.



## IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED MATH INSTRUCTION

### WHAT YOU MIGHT BE THINKING

#### Common Questions and Challenges in Implementing Evidence-Based Math Instruction

As we said in the introduction, you've probably heard many students and teachers say, or even thought to yourself, that "I'm just not a math person." For whatever reason, math can be intimidating. Here are some common questions and challenges you and your teachers may face as you consider making your math instruction more evidence-based.

#### CHALLENGE OR QUESTION

Some teachers are not confident in their own math abilities.

#### INSIGHT AND TIPS FROM THE FIELD

This is a really common feeling, especially among teachers who were not math majors in college! [Khan Academy](#) is a great free resource for teachers to develop their understanding of math concepts before teaching them. Similarly, teachers should consult with the math experts in the school who can help them prepare lessons and troubleshoot where students might have misconceptions.

Why are these strategies much broader than strategies for remediating reading issues, such as a phonemic awareness deficit?

There are two reasons. One, effective math instruction is an emerging field of research. Two, there's just much broader agreement on how to teach skills like phonemic awareness than there is on how to teach something like math fact fluency. Fortunately, the strategies in this guide are evidence-based. Although broad, they are flexible to support different aspects of math understanding.

Giving students the option to work with manipulatives or draw pictures feels like cheating.

Think of manipulatives like wearing glasses—they're an accommodation to achieve the same end goal, and they can keep students from falling further behind.

Additionally, students are actually quite adept at assessing their own abilities and their confidence. They will usually stop using manipulatives or pictures when they feel ready. Teachers can also assess each student's understanding and readiness to move on to more abstract thinking. A goal of math instruction should be to develop creative problem solvers, and we should celebrate the innovative methods students use to correctly solve math problems.



#### Stop and Jot

What do you perceive as the biggest barrier to evidence-based math instruction in your school?  
What role can you play in overcoming it? Who can work with you on this?

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## IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED MATH INSTRUCTION

### RELATED PSEL 2015 STANDARD(S)<sup>66</sup> For the Success of Students With Disabilities


#### Standard 4: Curriculum, Instruction, and Assessment

*How effective principals meet the standard for the support of students with disabilities:*

- > Communicate high expectations for all students, including students with disabilities; promote high-quality, intellectually challenging curricula and instruction; and provide opportunities for students with disabilities to achieve within the general education curriculum using a multi-tier system of supports.
- > Work collaboratively with classroom teachers to help them develop their capacity for effective instruction.
- > Ensure that evidence-based approaches to instruction and assessment are implemented with integrity and are adapted to local needs.
- > Promote appropriate, clear, and valid monitoring and assessment systems where teachers receive meaningful information about how students respond to instruction and where information is relevant to instructional improvement.

#### ADDITIONAL RESOURCES

 Additional knowledge building

 Self-assessment/ implementation support

 Turnkey professional development

 Coaching conversations

 Miscellaneous



#### Achieve The Core Coherence Map

An interactive website that illustrates the coherent structures of the Common Core State Standards for Mathematics. Teachers and school leaders can use the map to identify the specific standards that explicit instruction should focus on, based on student data.



#### Course Enhancement Module: MTSS in Mathematics (CEEDAR Center)

Compilation of resources for providing PD on multi-tier systems of supports (MTSS) in math. The module includes:

- > P A PowerPoint with speaker notes
- > Links to multimedia (videos and podcasts)
- > Activities for participants
- > Suggested readings



#### Strategies and Interventions to Support Students With Mathematics Disabilities (Council for Learning Disabilities)

A nine-page information sheet that describes math strategies to:

- > Teach problem-solving skills
- > Support vocabulary development
- > Teach algebraic concepts
- > Includes links to the recommendations of various advisory panels.



#### Evidence for ESSA: Research-Based Math Programs (Center for Research and Reform in Education)

Free, authoritative, user-centered database to help educators find programs and practices that align to the ESSA evidence standards and meet their local needs.



#### High-Quality Mathematics Instruction: What Teachers Should Know (IRIS Center)

A 90-minute interactive, multimedia learning module that covers

- > Components of high-quality math instruction
- > How to assess math curriculum materials
- > Evidence-based instructional strategies
- > Effective classroom practices



#### Mathematics and Science Institute for Students With Special Needs (The Meadows Center)

Institute offering information and resources on mathematics learning issues; they validate evidence-based assessments and interventions to prevent and remediate learning problems. Strands of research focus on:

- > The neuropsychological aspects of mathematics learning disabilities
- > Assessment and intervention at the elementary level
- > Effective programming at the secondary level

66: Council of Chief State School Officers & Collaboration for Effective Educator Development, Accountability, and Support Center. (2017). [PSEL 2015 and promoting principal leadership for the success of students with disabilities](#). Washington, DC & Gainesville, FL: CCSSO and CEEDAR Center.



## IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED MATH INSTRUCTION



### Mathematics Strategies to Support Intensifying Interventions (National Center on Intensive Intervention)

Math lessons and activities organized around six mathematics skill areas:

- > Number system counting
- > Place value concepts
- > Basic facts
- > Place value computation
- > Fractions as numbers
- > Computation of fractions

NCII also has a resource to help educators select [progress monitoring](#) tools.



### PALS Math

Website that offers resources on PALS (Peer-Assisted Learning Strategies) for math. This intervention uses explicit instruction, intentional pairing, and corrective feedback.



### 5 Ways Executive Functioning Issues Can Impact Math (Understood.org)

Describes how teachers and parents can help students with executive functioning issues deal with problems like:

- > Rushing through homework
- > Getting lost in the middle of complex problems
- > Not catching mistakes



### 7 Ways Kids Can Get Tripped Up by 1 Math Problem (Understood.org)

Describes how teachers and parents can help students with learning and attention issues deal with problems like:

- > Poor number sense
- > Memory problems
- > Visual processing



### Graphic Organizers to Help Kids With Math (Understood.org)

Provides downloadable versions of five graphic organizers that allow students to break down math problems into sequential steps.

- > The Frayer Model
- > Step-by-Step
- > Line It Up
- > Graph It Out
- > Break It Down



### What Is Mental Math? (Understood.org)

Describes how various learning issues can make it hard to do mental math.



### What Is a Specific Mathematics Disability? (Understood.org)

Defines dyscalculia and provides links to additional resources.



### Math Skills: What to Expect at Different Ages (Understood.org)

Lists the common math milestones that children commonly reach at different ages, from infancy through high school.



### Educator's Practice Guide on Teaching Math to Young Children (What Works Clearinghouse)

A 156-page practice guide providing educators with specific, evidence-based recommendations that address the challenge of teaching early math to children ages 3–6.



### Educator's Practice Guide on Teaching Strategies for Improving Algebra Knowledge in Middle and High School Students (What Works Clearinghouse)

A 64-page practice guide offering educators specific, evidence-based recommendations that address the challenges of teaching algebra to students in grades 6–12.

## PRIMARY CONTRIBUTORS

**Daniel Ansari**, Ph.D., is a professor in developmental cognitive neuroscience in the department of psychology and at the Brain and Mind Institute at Western University in London, Ontario, where he heads the Numerical Cognition Laboratory.



## IMPLEMENTING EFFECTIVE INSTRUCTION: EVIDENCE-BASED MATH INSTRUCTION

Michèle Mazzocco, Ph.D., is a professor at the Institute of Child Development at the University of Minnesota and director of the Early Math and Numeracy Lab.

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## EVIDENCE-BASED MATH INSTRUCTION: INVENTORY FOR ACTION For School Leaders



### Putting It All Together

We've consolidated key practices, steps, and resources to help your school get started on evidence-based math instruction—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice as a school leader, and where you might focus and prioritize your school's next efforts.

#### PRACTICES OF EVIDENCE-BASED MATH INSTRUCTION

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**My school has a comprehensive approach to assessing math skills and responding to data.**

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**My school uses evidence-based math practices and/or our math curriculum is aligned to the best practices.**

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**My school offers professional learning to all staff members on evidence-based math practices.**

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**My school actively engages families and caregivers in supporting students' math development.**

#### POTENTIAL NEXT STEPS

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- ☐ Learn more about [MTSS](#).
- ☐ Complete the [CEEDAR Center's MTSS for Mathematics](#), an interactive module focused on assessment tools and intervention practices that should be integrated into a comprehensive, evidence-based math intervention program within the response to intervention (RTI) framework; this module also supports the design and facilitation of professional learning.

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- ☐ Find [evidence-based math programs](#) that match your state, district, school, or classroom.

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- ☐ Explore “Additional Resources” in this section for ideas about getting started with PD that fits your teachers' needs.

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- ☐ Invite families into the school for Family Math events, and leverage the [math resources for families](#) on Understood.org.
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## EVIDENCE-BASED MATH INSTRUCTION: INVENTORY FOR ACTION For Teachers



### Putting It All Together

We've consolidated key practices, steps, and resources to help you get started on evidence-based math instruction—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice, and where you might focus and prioritize your next efforts.

#### PRACTICES OF EVIDENCE-BASED MATH INSTRUCTION

#### POTENTIAL NEXT STEPS

I use explicit instruction to introduce math concepts to students.

- ☐ Communicate a [clear learning outcome](#).
- ☐ Give [clear explanation of content](#).
- ☐ [Provide multiple models](#) to show all steps and/or provide unique examples.
- ☐ [Verbalize](#) your thinking.
- ☐ Use methods for [eliciting frequent responses](#).
- ☐ Implement guided and independent [practice opportunities](#).
- ☐ [Provide immediate feedback](#) to students.

My students have opportunities for cumulative practice.

- ☐ Use Do Nows that activate prior knowledge.
- ☐ Provide 10 minutes per lesson for basic arithmetic facts fluency practice.
- ☐ Schedule time for [math games](#).

My students use visual representations.

- ☐ Teach students to use [number lines](#), tape diagrams, pictures, graphs, and/or [graphic organizers](#).
- ☐ Require visual representations as part of students' submitted assignments/assessments.

I teach using the concrete-representational/pictorial-abstract (CR/PA) structure.

- ☐ Introduce concepts/skills using concrete manipulatives (e.g., base 10 blocks, Unifix cubes); provide students with practice opportunities.
- ☐ Model concepts/skills using representations/pictures (e.g., tallies, dots, circles); provide students with practice opportunities.
- ☐ Model concepts/skills at the abstract level (e.g., using numbers and symbols); provide students with practice opportunities.

I teach problem-solving using schema-based instruction.

- ☐ Teach students to analyze a word problem and [identify the pattern](#).
- ☐ Demonstrate multiple ways to solve problems.

My students have opportunities for peer-assisted learning.

- ☐ Provide time for debriefing after independent practice.
- ☐ Schedule time for peer-assisted math games.



## EVIDENCE-BASED MATH INSTRUCTION: SELF-REFLECTION



### Self-Assessment and Planning for Action

The purpose of this section is to support your reflection and conversation about possible next steps for evidence-based math instruction in your school or classroom. Use the questions below to reflect on your current practice.

How does my current practice align to the descriptions in this section of the guide?

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What strategies do I want to begin implementing?

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Which resources presented in this guide will I use, and what professional organizations will I engage with further? (Review “Additional Resources” and “Inventory for Action” to support your next steps.)

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What additional support will I need to implement these strategies? Who in my school or district can support my development?

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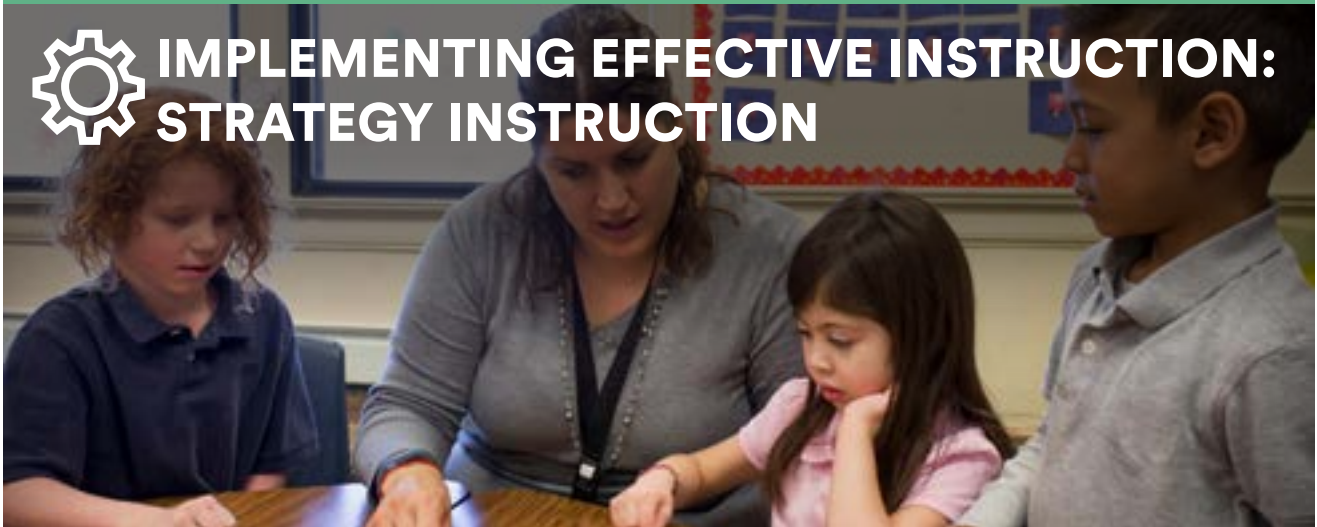
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# IMPLEMENTING EFFECTIVE INSTRUCTION: STRATEGY INSTRUCTION



## LEARNING TO LEARN

### Going “Meta”

**It's Friday morning in Mr. Hossack's fourth-grade classroom.** Students are finishing up their school year with a “maker space” project in which each student will demonstrate his or her passion through a presentation or performance. Students pick up their materials and move off to work independently. One student is building a robotic dinosaur. Another student is composing her own music. Someone else is designing a comic book. A group heads down to the library to research topics like the climate crisis and limiting plastic usage.

The students work largely independently, with teacher check-ins every now and then. Each student can tell an observer his or her goals and the plan for being ready for the showcase in two weeks. At the end of this maker time, students will update their project plan: How was their time spent today? How well did they use their time? What are their next steps? What did they learn from today's maker time?

Were these students always this independent, organized, or reflective? Hardly! Mr. Hossack spent the previous eight months of the school year deliberately cultivating these skills through strategy instruction and preparing a group of independent learners.



“It's our obligation to help students understand that they can be successful despite their experiences in the past. They will want more [strategy instruction] because it demystifies how to make learning easier and it helps them be successful.”

*David Allsopp, Ph.D., Professor of Special Education in the College of Education at the University of South Florida*



“The world demands people who can change quickly and continually learn new information and skills. Strategy instruction is what students can use in the future when the content inevitably changes. If we care about the long-term success of students, we need to implement strategy instruction. Students will be in a position to compete much better because they know how they learn.”

*Don Deshler, Ph.D., Williamson Family Distinguished Professor Emeritus of Special Education and Director of the Center for Research on Learning (CRL) at the University of Kansas*

## WHAT IT IS

### Defining Strategy Instruction

**Do you remember how you learned to learn?** For most of us, it happened like this: As we engaged in various learning tasks and assignments, we made mental notes of things that seemed to work well for us and things that didn't. We used that information to alter how we went about learning and performing future tasks. Over time, we became better at “learning how to learn” because we used the strategies that made learning easier and more effective for us. In short, we became strategic learners.

But students with learning and attention issues often don't make those mental notes of what seems to



## IMPLEMENTING EFFECTIVE INSTRUCTION: STRATEGY INSTRUCTION

work well and what doesn't. They may not naturally acquire different learning strategies that will help them become good learners over time. In the absence of such strategies for learning and using new content, they fail to become independent learners. That's where learning strategy instruction comes in.

If content is the "what" of our learning, then strategy instruction is the "how" of learning rigorous content. Strategy instruction is teaching students how to:

- > Acquire information (e.g., paraphrasing, asking questions, making visual images, etc.)
- > Remember information (e.g., listening, notetaking, organizing, making mnemonics, etc.)
- > Express information (e.g., organizing, formulating, editing, etc.)

Strategy instruction helps students become better learners who are able to solve problems and self-monitor their thinking. The overriding goal in strategy instruction is to help students become habitual, flexible, and automatic in their use of different learning strategies (and, for the 1 in 5, to appropriately advocate for the accommodations they need in school and work).

If you're thinking that strategy instruction is most appropriate for students in upper elementary school and beyond, you're right. In K–3, instruction is mostly focused on basic skills in reading, writing, and math. But once students hit fourth grade, the grade-level demands shift dramatically. Strategy instruction becomes much more relevant and increases in importance with each year in school.



### CORE IDEA #1

The goal is for all students to become expert, independent learners. While rigorous content lays the foundation for students to be college- and career-ready, strategy instruction is the vehicle that empowers students to not only learn content effectively, but also to own the journey and process.

## WHY IT'S IMPORTANT

### How Strategy Instruction Supports the 1 in 5 and All Students

**Strategy instruction is critical for the 1 in 5.** Many students with learning and attention issues assume that their peers are just more successful at learning because of innate ability. **Strategy instruction** can make them aware that there are powerful, lifelong tools to help them develop their cognitive and metacognitive abilities. It can make learning easier so that the 1 in 5 become more successful in Pre-K–12 schools, in college and university settings, and in their careers.

Research shows that students actively involved in the learning process have better retention, motivation, and overall attitudes toward learning—and that integrating strategy instruction into a school's overall instructional plan can increase student performance and outcomes.<sup>67</sup> Learning how to self-regulate can help students monitor their own progress and see improvements.

For students who struggle with metacognitive skills, such as the ability to manage thoughts, actions, and emotions in order to complete tasks, strategy instruction can be particularly helpful. These skills contribute to a student's ability to plan, organize, and manage their time. Strategy instruction helps students manage or reduce the effort put on the brain. This frees up a student's *working memory* (i.e., the cognitive system that holds information temporarily for processing). Strategy instruction similarly supports students who struggle with *flexible thinking*, or the ability to think about something in multiple ways. Finally, this practice promotes learners' ability to practice self-control and sustain attention to a task.<sup>68</sup>

Strategy instruction also lays the foundation for building social and emotional skills that research has found to be critical to students with learning and attention issues. Strategy instruction can also be applied to enhance students' social interactions (e.g., listening, interpreting nonverbal signals, etc.). Just like content-area strategies, social-emotional strategies should be integrated into the curriculum to support learners.

67: Christenson, S. L., Reschly, A. L., & Wylie, C. (Eds.). (2012). *Handbook of research on student engagement*. New York, NY: Springer Science + Business Media.

68: Lai, E. R. (2011). [Metacognition: A literature review](#). Washington, DC: Pearson.



## IMPLEMENTING EFFECTIVE INSTRUCTION: STRATEGY INSTRUCTION

While strategy instruction is a critical tool for supporting the 1 in 5, it is also effective with other learners. Studies of both middle schoolers and primary-level students who were taught cognitive and metacognitive strategies found that they did better than peers who received typical math instruction.<sup>69</sup> And for English language learners, it's a plus that strategy instruction is language neutral. ELLs can learn the strategy more easily in their native language and then apply it when they are doing their work in English.



### CORE IDEA #2

Strategy instruction demystifies the learning process for students and reduces stigma for the 1 in 5 by demonstrating that intelligence is not fixed.

## WHAT IT LOOKS LIKE

### Strategy Instruction in Action

**Your school probably already uses strategy instruction to some degree.** Teachers of reading or the humanities often teach skills like summarizing and inferencing. Teachers in the STEM field inevitably teach students how to problem-solve and how to evaluate the reasonableness of an answer. The goal of this section is to give you and your teachers the tools and resources you need to become more intentional and proactive in your strategy instruction for the 1 in 5 and *all* students. To begin, consider two general kinds of learning strategies that can improve students' success:

**Cognitive strategies** give students the foundation for success in school. They include an array of strategies for acquiring, remembering, and expressing content information.

**Metacognitive strategies** are methods used to help students understand the way they learn. In other words, they are designed to help students "think about their thinking." These strategies involve self-assessments, self-regulation, and self-monitoring.

To ensure that students are successful, the key is **pairing instruction in cognitive and metacognitive strategies**. In math, for example, this enables students to consider the appropriateness of their approach to solving the problem, make sure all steps are included, and check for accuracy.

Below are brief descriptions and areas of learning that cognitive and metacognitive strategies might target.

#### COGNITIVE

Knowing how to reach a learning outcome, e.g., how to add the numbers to find the sum.

*Examples: Using effective study methods, making mental pictures, grouping into categories, taking notes/making summaries, remembering things learned earlier that might help with a current task or problem*

Cognitive strategies commonly fall into these buckets:

- > Organization (i.e., time and/or materials)
- > Study skills and test preparation
- > Test taking
- > Notetaking
- > Advanced thinking (e.g., organizing information sequentially, determining cause and effect, problem-solving)

69: Montague, M., Enders, C., & Dietz, S. (2011). [Effects of cognitive strategy instruction on math problem solving of middle school students](#). *Learning Disabilities Quarterly*, 34(4), 262–272; Pfannenstiel, K. H., Bryant, D. P., Bryant, B. R., & Porterfield, J. (2015). [Cognitive strategy instruction for teaching word problems to primary-level struggling students](#). *Instruction in School and Clinic*, 50(5), 291–296.



## IMPLEMENTING EFFECTIVE INSTRUCTION: STRATEGY INSTRUCTION

### METACOGNITIVE





Tools for planning for learning, monitoring your own comprehension and production, and evaluating how well you achieved a learning objective. These processes typically occur before or after a cognitive strategy.

*Example: Double/triple-checking an answer*

Metacognitive strategies commonly fall into these buckets:

- > Self-assessments: reflection (of content knowledge or learning skills)
- > Self-instruction: think-alouds and modeling
- > Self-monitoring: organizational tools (checklists, rubrics, etc.)

Both cognitive and metacognitive strategies can be taught and applied to academic content areas. Strategy instruction also applies to academic content areas as well as the “soft skills” of organization and test preparation. To be most effective in the general education classroom, strategy instruction should be integrated into the core curriculum. Below are some examples of how both types of strategy instruction connect to core content areas.

AREA	INTEGRATE STRATEGY INSTRUCTION BY TEACHING STUDENTS HOW TO...
<b>Reading</b> 	Make inferences from a text Determine the main idea and supporting details Paraphrase or summarize information Self-monitor accuracy and comprehension
<b>Writing</b> 	Develop and organize an outline in response to a prompt Develop and strengthen writing by revising Develop and strengthen writing by editing
<b>Mathematics</b> 	Make sense of a problem Reason abstractly and quantitatively Use tools (e.g., number line, tape diagram) strategically Self-monitor accuracy Use mnemonics and schemas
<b>Science</b> 	Recall definitions Conduct scientific experiments Use mnemonics and schemas

## PROVIDING MORE INTENSIVE STRATEGY INSTRUCTION

This section’s discussion so far has described general strategies that support *all* learners. In schools using the multi-tier system of supports (MTSS) framework, this instruction would be at Tier 1. Strategy instruction can be intensified at Tiers 2 and 3 by using a model like self-regulated strategy development (SRSD). Under this model, strategy instruction is taught in a series of steps that evolve from identifying specific challenges, to understanding why a strategy is important, to practicing and internalizing the strategy.

The figure below describes the SRSD model’s most critical components for supporting the 1 in 5. You and your teachers might want to explore the model collaboratively and consider how these components would apply to your efforts to implement strategy instruction.



## IMPLEMENTING EFFECTIVE INSTRUCTION: STRATEGY INSTRUCTION

### FOR TEACHERS: KEY STEPS FOR IMPLEMENTING STRATEGY INSTRUCTION

(BASED ON THE SRSD MODEL)

KEY STEPS	WHY IT MATTERS	WHAT IT LOOKS LIKE
<p><b>Reflect and prioritize.</b>  <b>Reflect on what the standards require and what skills your most successful learners demonstrate.</b></p>	<p>Strategy instruction is not a “one and done” approach. It must be continually integrated and reinforced. On the surface, it can seem daunting—there are many strategies to be taught. But analyzing what students need specifically and prioritizing accordingly helps teachers focus their efforts.</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Reflect on the learning behaviors of learners who succeeded with a task versus those who struggled. What were the barriers to success?</li> <li><input type="checkbox"/> Identify two or three strategies (e.g., organization and planning, error monitoring, study skills) to emphasize and explicitly teach on an ongoing basis.</li> <li><input type="checkbox"/> Plan to set goals with students related to these strategies, and to provide routine feedback to support these skills in becoming automatic.</li> <li><input type="checkbox"/> Ask students to <a href="#">reflect on their challenge</a>.</li> </ul>
<p><b>Develop and activate background knowledge.</b></p>	<p>The 1 in 5 and other struggling learners may lack essential background knowledge (sometimes linked to cultural or linguistic backgrounds) or pre-skills necessary to complete a task or use a strategy successfully. Other times, that knowledge may be fragmented.</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Define the basic skills needed to perform the strategy. You can start with the standard, the objective, or the strategy and ask, “What would a student need to know or be able to do to demonstrate mastery?”</li> <li><input type="checkbox"/> Break down the terms used in the strategy and put in its most basic components.</li> <li><input type="checkbox"/> Perform a task analysis to identify the prerequisite skills and related gaps students may have. (Note: This is a useful exercise to do with colleagues in co-teaching teams, grade-level meetings, or content meetings.)</li> </ul> <p>Task analysis examples:</p> <ul style="list-style-type: none"> <li>&gt; Making a <a href="#">PB&amp;J sandwich</a></li> <li>&gt; <a href="#">Writing a simple research paper</a></li> <li>&gt; <a href="#">Multiplication</a></li> </ul>
<p><b>Integrate into lesson plans.</b></p>	<p>Breaking the strategy down into smaller components that can be integrated into other instruction in the lesson plan ensures that teacher investment in planning leads to effective use of the strategy. Research has shown that strategy instruction is effective when integrated with direct instruction.<sup>70</sup> It also ensures that teachers don’t invest upfront time without the follow-through to ensure that the strategy can be generalized.</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Review the remaining steps in this table and map out the desired strategy in your lesson plans.</li> </ul> <p>For an example of a lesson plan to teach a strategy connected to reading instruction, see this example from the University of Nebraska for “<a href="#">Read-Ask-Paraphrase</a>.”</p>
<p><b>Make strategy explicit to students.</b></p>	<p>When students understand the “why” behind the strategy, the teacher can gain critical buy-in. If they understand how the strategy can help them and their future learning, they are more likely to use it.</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Explain why you’ve prioritized these strategies.</li> <li><input type="checkbox"/> Make clear connections between these strategies and long-term application and benefit. (If improved academic performance is not motivating for your particular students, figure out what does motivate them.)</li> </ul>

70: Archer, A. L., & Hughes, C. H. (2011). *Explicit instruction: Effective and efficient teaching*. New York, NY: Guilford Press.





## IMPLEMENTING EFFECTIVE INSTRUCTION: STRATEGY INSTRUCTION

### KEY STEPS

Teach strategy sequentially and explicitly through modeling.

### WHY IT MATTERS

Strategy instruction is most effective when combined with direct instruction. By having a model of how to use a particular strategy coupled with guided and independent practice and corrective feedback, students can move to independence and generalization.

Modeling not only shows what to do, but also how to think. Beyond just listing the steps in a strategy, incorporating a think-aloud into a model shows students the metacognitive process involved in understanding and using the strategy.

### WHAT IT LOOKS LIKE

- ☐ Introduce students to the individual steps of the strategy following an [explicit instruction](#) model.
- ☐ Throughout the introduction of the strategy, monitor students' understanding by eliciting frequent responses.
- ☐ [This example](#) demonstrates a think-aloud of a cognitive strategy.

Provide response opportunities and internalize the strategy through practice.

Students with learning and attention issues sometimes have a limited amount of processing capacity. If that capacity is consumed with remembering the steps, it can be challenging for them to focus on the task or objective itself. The goal is for the strategy to become second nature to students.

The key element is repetition and variation—the more practice students get in a variety of settings and situations, the more likely they will internalize the strategy. To memorize or name the steps, a teacher could use round-robin activities or a ball toss. As students move from memorizing the steps to doing them, activities could include prompting, etc. Integrate the [UDL](#) principle of giving students opportunities for action and expression here.

Support the strategy.

Scaffolding a strategy ensures students get adequate time and support to master it. This encourages the gradual transfer of strategy performance and ownership from teacher to student.

Once a strategy is internalized/memorized, the most important thing is to keep integrating opportunities for students to use the strategy. Supporting the strategy may include:

- ☐ Working collaboratively on tasks using scaffolding while gradually fading help
- ☐ Putting students into small groups
- ☐ Remodeling/reteaching the strategy
- ☐ Prompting the particular use of a step
- ☐ Providing corrective feedback

Establish independent performance.

Students who have reached independent performance of the strategy are able to leverage its benefits beyond the individual class. Students may adapt the strategy to meet their needs, as long as the strategy still successfully allows them to complete the task. Modifications can mean that the student is aware of their own strengths and weaknesses and has modified the strategy to better suit their needs.

Involving students as co-evaluators of their use of the strategy increases ownership and reinforces progress.

Once a student appears to have mastered a strategy, you should continue to observe and assess. You can do this by:

- ☐ Having your student(s) periodically explain how and why they use or would use the strategy (or identifying what strategy to use in the moment)
- ☐ Having them maintain a strategy notebook—a record of the times they use a strategy or how they modify it for other tasks—and rewarding them for doing so
- ☐ Actively promoting the use of strategies; students may not automatically generalize in different situations
- ☐ Using portfolios to monitor progress, offer opportunity for reflection, and show students that progress is as important as achievement

At a minimum, you want to know whether:

- ✓ Students are actually using the strategy
- ✓ The strategy had a positive effect on performance
- ✓ Students perceive the strategy as valuable and manageable



## IMPLEMENTING EFFECTIVE INSTRUCTION: STRATEGY INSTRUCTION

### AN INVESTMENT THAT PAYS BIG DIVIDENDS

While strategy instruction might seem elaborate, it can be quite a low lift! Consider a class where the teacher repeatedly sees students struggling with time management. The teacher might equip students with an advanced planner and a daily agenda to help them organize their time. The teacher could also start or end every class with a few minutes devoted to looking at the calendar ahead and modeling for students how they might structure their time to prepare for upcoming assessments or projects.

The initial investment of time in strategy instruction can save time later by creating more active engagement and natural opportunities in the classroom.



#### CORE IDEA #3

Once you have prioritized a strategy for your students, see it through all the way to independence and generalization to other concepts or skills.

### WHAT YOU MIGHT BE THINKING

#### Common Questions and Challenges in Implementing Strategy Instruction

Strategy instruction can feel daunting to start—especially if you’re someone who has always found learning an easy process. It can be difficult to verbalize, let alone teach, the things that make you a good learner. And it can also be frustrating when students come to the classroom without foundational learning skills (e.g., notetaking) that you feel they should already know.

There are real challenges and barriers in implementing strategy instruction, but it can be done. Here are some common questions and challenges you and your teachers might have as you consider how to provide strategy instruction.

#### CHALLENGE OR QUESTION

Some teachers may say, “I taught it, but they don’t use it.”

We don’t have time in the curriculum to add one more thing. Will it really save time?

#### INSIGHT AND TIPS FROM THE FIELD

Strategy instruction is not “one and done.” Even for a simple strategy, teachers should plan to do some reteaching, review, and modeling periodically. Taking the time to thoroughly teach a small number of prioritized strategies is better than trying to teach a large number less thoroughly. Refer teachers to “Key Steps for Implementing Strategy Instruction.” Ask them to reflect on these steps and make enhancements.

Go slow to go fast! Don’t think of strategy instruction as something independent to teach. Instead, integrate it into lesson planning to support existing objectives and standards. Suggest that teachers:

- Identify two or three strategies (e.g., organization and planning, study skills, error monitoring) to explicitly teach students.
- Consider how they can integrate strategy instruction with their content-area instruction.
- Review the suggested steps in the “Inventory for Action” section for practical ways to incorporate strategy instruction into the classroom.

Building the ability to learn independently is the key to making faster progress.



## IMPLEMENTING EFFECTIVE INSTRUCTION: STRATEGY INSTRUCTION



### Stop and Jot

What do you perceive as the biggest barrier to strategy instruction in your school?  
What role can you play in overcoming it? Who can work with you on this?

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## RELATED PSEL 2015 STANDARD(S)<sup>71</sup> For the Success of Students With Disabilities

### Standard 4: Curriculum, Instruction, and Assessment

*How effective principals meet the standard for the support of students with disabilities:*

- > Communicate high expectations for all students, including students with disabilities; promote high-quality, intellectually challenging curricula and instruction; and provide opportunities for students with disabilities to achieve within the general education curriculum using a multi-tier system of supports.
- > Work collaboratively with classroom teachers to help them develop their capacity for effective instruction.
- > Ensure that evidence-based approaches to instruction and assessment are implemented with integrity and are adapted to local needs.
- > Promote appropriate, clear, and valid monitoring and assessment systems where teachers receive meaningful information about how students respond to instruction and where information is relevant to instructional improvement.

## ADDITIONAL RESOURCES



Additional knowledge building



Self-assessment/implementation support



Turnkey professional development



Coaching conversations



Miscellaneous



### Note-Taking: A Research Roundup

A podcast in which Cult of Pedagogy's Jennifer Gonzalez summarizes the research on teaching notetaking.



### SRSD: Using Learning Strategies to Enhance Student Learning (IRIS Center)

A one-hour interactive, multimedia learning module that features the self-regulated strategy development (SRSD) model, which includes six steps to effectively teach a learning strategy:

- > Develop background knowledge
- > Discuss it
- > Model it
- > Memorize it
- > Support it
- > Establish independent practice



### Study Skills Strategies (Part 1): Foundations for Effectively Teaching Study Skills (IRIS Center)

### Study Skills Strategies (Part 2): Strategies That Improve Students' Academic Performance (IRIS Center)

Part 1 (two and a half hours) and Part 2 (one hour) of an interactive, multimedia learning module that discusses the importance of teachers providing explicit instruction on the use of study skills strategies. It overviews a number of effective strategies, including:

- > Graphic organizers
- > Notetaking
- > Mnemonics
- > Organizing materials
- > Time management

71: Council of Chief State School Officers & Collaboration for Effective Educator Development, Accountability, and Support Center. (2017). [PSEL 2015 and promoting principal leadership for the success of students with disabilities](#). Washington, DC & Gainesville, FL: CCSSO and CEEDAR Center.



## IMPLEMENTING EFFECTIVE INSTRUCTION: STRATEGY INSTRUCTION

- > Comprehension strategies
- > Self-regulation strategies



### What Evidence-Based Mathematics Practices Can Teachers Employ? (IRIS Center)

Part of a learning module on high-quality math instruction, this section discusses learning strategies instruction for math. It includes videos of application in both elementary and secondary settings.



### The Learning Toolbox (James Madison University Special Education Program)

Interactive tools to help high school students with mild disabilities, their teachers, and their parents learn about various learning strategies.

The website was developed to be responsive to the specific needs of students with learning disabilities and ADHD, using such features as reduced amounts of text for reading; use of graphics to enhance the meaning of the reading material; and elimination of distracting stimuli such as nonpurposeful animations and sound effects.



### The Strategic Instruction Model™ (University of Kansas Center for Research on Learning)

Website offering resources and information about the SIM, which:

- > Provides students with tools to solve problems independently
- > Emphasizes teaching routines that allow teachers to organize and present curriculum content in straightforward, easy-to-learn ways



### Strategic Instruction Model (SIM) Content Literacy Continuum (University of Kansas Center for Research on Learning)

Information about the SIM Content Literacy Continuum (CLC), which focuses on helping secondary schools develop and sustain comprehensive and integrated literacy programs. This school improvement process is led by a SIM Implementation Team with extensive experience in secondary literacy.



### Understanding Executive Functioning Issues (Understood.org)

Overview of challenges students may face related to executive function and what teachers can do to help.



### Cognitive Strategy Instruction (University of Nebraska)

Discusses how to implement strategy instruction; includes examples of many strategies.



### The Writing Revolution

Website that describes “a proven, coherent method that enables all students, and especially those from low-income families, to develop the literacy and critical-thinking skills they need to engage productively in society.” The method integrates strategy instruction that is embedded in the curriculum across all content areas and grade levels.

## PRIMARY CONTRIBUTORS

**David Allsopp**, Ph.D., is a professor of special education in the College of Education at the University of South Florida.

**Don Deshler**, Ph.D., is the Williamson Family Distinguished Professor Emeritus of Special Education and director of the Center for Research on Learning (CRL) at the University of Kansas.

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## STRATEGY INSTRUCTION: INVENTORY FOR ACTION

### For School Leaders



#### Putting It All Together

We've consolidated key practices, steps, and resources to help your school get started on strategy instruction—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice as a school leader, and where you might focus and prioritize your school's next efforts.

#### PRACTICES OF STRATEGY INSTRUCTION

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**My school has a vision statement for its approach to strategy instruction.**

#### POTENTIAL NEXT STEPS

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- ☐ Develop and implement guidance documents to support strategy instruction (e.g., align state standards and logical strategy instruction connections).
- ☐ Implement strategy instruction within a tiered instructional model; some strategies are more effectively taught at Tier 2 or Tier 3 within the special education setting.

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**My school offers professional development to all staff members on strategy instruction.**

- ☐ Develop and facilitate PD aligned to strategy instruction.

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**My school actively engages parents and families in supporting students' development and use of cognitive and metacognitive strategies.**

- ☐ Include information and strategies for parents in folders sent home, in school newsletters, and in parent conferences.
  - ☐ Provide information in parent-friendly language on [why](#) metacognitive strategies are important and [how](#) they can help their children learn these skills.
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## STRATEGY INSTRUCTION: INVENTORY FOR ACTION

### For Teachers



#### Putting It All Together

We've consolidated key practices, steps, and resources to help you get started on strategy instruction—or to build on the efforts you already have underway. You can use this “Inventory for Action” as a reference to help you reflect on where you are in your practice, and where you might focus and prioritize your next efforts.

#### PRACTICES OF STRATEGY INSTRUCTION

**I integrate and explicitly teach cognitive and metacognitive processing strategies.**

**I encourage students to ask clarifying questions or self-advocate for a different instructional approach.**

**I require students to plan and/or outline before completing an academic task.**

**I require students to reflect on their own learning.**

#### POTENTIAL NEXT STEPS

- ☐ Identify two or three strategies (e.g., organization and planning, study skills, error monitoring) to explicitly teach students.
- ☐ Set goals aligned to these strategies.
- ☐ Provide routine feedback on progress toward the goals.
- ☐ Monitor the consistent use of strategies once taught.

- ☐ Create opportunities for students to ask questions during instruction.
- ☐ Build a culture of academic risk-taking and self-advocacy.

- ☐ Provide students with graphic organizers.
- ☐ Provide students with daily agenda.
- ☐ Break large assignments into smaller chunks with interim due dates.
- ☐ Incorporate proof of planning and organizing into assessment rubrics.

- ☐ Add self-reflection questions to daily Exit Tickets.
- ☐ Add self-assessment questions to assessments.



## STRATEGY INSTRUCTION: SELF-REFLECTION



### Self-Assessment and Planning for Action

The purpose of this section is to support your reflection and conversation about possible next steps for strategy instruction in your school or classroom. Use the questions below to reflect on your current practice.

How does my current use of strategy instruction align to the descriptions in this guide?

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What strategies do I want to begin implementing?

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Which resources presented in this guide will I use, and what professional organizations will I engage with further? (Review “Additional Resources” and “Inventory for Action” to support your next steps.)

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What additional support will I need to implement these strategies? Who in my school or district can support my development?

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## CONCLUSION

# CONCLUSION: WHERE WE GO FROM HERE



## RETURNING TO CHIARA'S JOURNEY

**Let's come back to Chiara, the teacher we heard from in the introduction.** Over the course of a year, Chiara worked with a community of teachers to learn more about effective mindsets and practices for teaching the 1 in 5 and to try these practices in their classrooms. Here are her responses to some of the self-reflection questions she completed as part of the Teacher Fellowship program. We hope Chiara's reflections help you and the teachers you lead as you begin (or continue) your journey to support the 1 in 5 and all students.

### What did you decide to focus on this year and why?

“I decided to focus on collaborating with families, caregivers, and students. I started with administering Understood.org's Student and Caregiver Questionnaire. Although I had pride in the relationships I built with my students and their families, I realized that I was missing an important piece in really getting to know them—asking them how they learn best and what they need. In that moment, I made a commitment to really focus on each of my students as truly unique individuals and as advocates for their own learning. That allowed me to better meet their needs, and I was able to design learning experiences using Universal Design for Learning in a very intentional way.”

### What impact did you see from the practices you tried to implement?

“Instead of grouping my students based on common learning and thinking differences and accommodating in this way, I began to look at my students with compassionate curiosity. I was flexible with my instruction. Through the use of UDL principles, I was able to remove barriers specific to each of my students—giving them back their individuality and focusing on their personal pathway to develop skills and learn concepts. As a result, they grew as learners.”

### What lessons did you learn when focusing on these strategies?

“Kids are really the experts of their own educational journey. As teachers, we can be facilitators and guides. But when we give students—especially those with learning and attention issues—a voice in their own learning, they can advocate for what they need to thrive in the classroom and in life. By being intentional in my planning for students with learning and thinking differences and breaking down the barriers in engagement, representation, and action and expression, I can really personalize learning for each of my students to maximize their learning.”

### What advice would you give teachers and leaders getting started with these practices?

“Listen first. Our kids have a lot to say if we give them the opportunity to use their voice. By helping them advocate for themselves and telling teachers what they need to find their own personal success in the classroom, we as educators can focus on planning lessons to meet those unique needs.”

## CONCLUSION: WHERE WE GO FROM HERE

### LOOKING BACK Putting It All Together

You've invested time in not only learning from this guide but actively reflecting every step of the way. Now let's build on that investment by reviewing your reflections and identifying the top three actions you can take this week, this month, and this year, as well as the people and resources you can tap to support your growth.

**1** Think about the students in your school and those you expect to serve next year. What are the specific needs of those students? What might be some of the needs or challenges you and your teaching staff have experienced while supporting them? What additional data do you need to gather?

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**2** Go back to your reflections in each toolkit section, review the strategies you flagged, and identify the top 3 strategies that you want to begin implementing. List them here.

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**3** Plan your path forward.  
a. Articulate your support plan. What additional support will you need to implement these strategies? Who in your building or district can support your development?

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b. **Join the community at Understood.** Which **Understood** resources or other resources can support you in the coming weeks?

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c. Think about how you can build a community of practice around the strategies you're exploring. In what ways could you lead professional learning with your colleagues?

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**4** Engage with families. Students whose families and caregivers are involved in the school community are often more motivated learners and have more positive attitudes toward education. Invite families into your school and classrooms. Consider which **barriers** toward their participation exist, and work to remove them. List three meaningful actions you can take in this area.

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## CONCLUSION: WHERE WE GO FROM HERE

- 5** Advocate. Effective advocacy can dramatically improve the outcomes for all learners, but especially for the 1 in 5. Consider what actions you can take to advocate in your school, your district, and your community. Review resources from the [National Center for Learning Disabilities \(NCLD\)](#) and sign up for policy alerts.
- Look back at your reflections from this guide and identify one schoolwide practice you will advocate for, including professional learning or curriculum aligned to the mindsets and practices in this guide. Describe how you plan to advocate for this area.

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Thank you for the work you do every day on behalf of students and teachers in your school, and for engaging in this work to better serve the 1 in 5. At NCLD and Understood, we're excited to partner with you, and we look forward to continuing to support you. We are constantly evolving our resources, so please stay engaged in the following ways:

[Sign up](#) for emails from NCLD so you can be the first to know when there's an opportunity to speak out and advocate on behalf of the 1 in 5.

 /NCLD.org

 @nclldorg

[Sign up](#) to be the first to know when new resources are added to Understood's educator resources.

 /understood

 @UnderstoodOrg

[Visit Understood](#) to find free, practical, evidence-based resources for educators (and families!) added every month.



### CORE IDEA

It will take all of us, working together, to create an education system that better prepares and supports teachers as professionals, so they can better support the 1 in 5 and *all* students.

This work is possible, urgent, and necessary!

# HELPFUL TERMS

## 504 plan

A blueprint for how a school will provide supports and remove barriers for a student with a disability, so the student has equal access to the general education curriculum. Students with 504 plans do not require individualized instruction, but they do require accommodations (e.g., audiobooks, notetaking aides, extended time to complete tests).

## accommodation [↗](#)

Something that changes how a student learns material. Accommodations can help students learn the same material as their peers. This allows them to meet the same expectations. A student with dyslexia, for example, might listen to an audio version of a book, but it's still the same book that the rest of the class is reading.

## attention issues

A general term that refers to brain-based conditions impacting a person's ability to focus, such as attention-deficit disorder (ADD) and attention-deficit hyperactivity disorder (ADHD), a condition characterized by symptoms that include inattention, hyperactivity, and impulsivity.

## critical mindsets

The three beliefs or attitudes that educators hold that appear to have a positive influence on the learning and development of students with learning disabilities and attention issues: strong sense of self-efficacy, positive orientation toward inclusion and personal responsibility for all students, and a growth mindset.

## culturally responsive teaching

Instruction that empowers students by using their cultural and linguistic backgrounds to support teaching and learning of knowledge, skills, and concepts.

## differentiated instruction [↗](#)

Instruction that has the same learning goal for all students but is tailored to match their learning needs and allows them to show what they know in different ways.

## diversity

The belief that people are unique and have differences among a broad spectrum of qualities, including age, race, ethnicity, culture, religion and other beliefs, socioeconomic status, sex, gender identity, sexual orientation, and disability status, including learning and thinking differences. Diversity is more than acknowledging and tolerating differences—it's embracing them. It means that when we embrace all of the dimensions of human experience and identity, our organization will have a greater impact.

## equity

Providing all people the access and supports they need to be successful and thrive together. It is the recognition that society hasn't put us on an equal playing field. Equity means thoughtfully and consciously working to break patterns of who has traditionally had access to opportunities.

## evidence-based content instruction

Instruction that leverages practices based on explicit, structured, and sequential content instruction for literacy and math. The Every Student Succeeds Act (ESSA) defines evidence-based programs as any "activity, strategy, or intervention that shows a statistically significant effect on improving student outcomes or other relevant outcomes."

## explicit instruction [↗](#)

Instruction that makes learning processes overt and clear.

## fidelity

The degree of exactness with which something is copied or reproduced.

## flexible grouping [↗](#)

Instruction that uses data to frequently rearrange students according to their needs and strengths for small-group instruction.

## general education

The knowledge and skills that all students in a state are expected to master.

## growth mindset [↗](#)

The belief that one can improve through practice and hard work.

## Individuals with Disabilities Education Act (IDEA) [↗](#)

The federal law that guarantees all children with disabilities access to a free and appropriate public education.

## inclusion

An approach to ensure that students who receive special education are part of the general education classroom and school community. The intent of inclusion is to ensure that students with disabilities receive the necessary supports to be successful in the general education curriculum.

## Individualized Education Program (IEP) [↗](#)

A legally binding document that details the support and services (such as speech therapy or multisensory reading instruction) a school will provide to meet the individual needs of a student with a disability who qualifies for special education.

## key practices

The eight actions educators can take or strategies they can implement to improve achievement of the 1 in 5 in a general education classroom, with evidence that they can also improve achievement for all students in inclusion settings: explicit, targeted instruction; Universal Design for Learning; strategy instruction; positive behavior strategies; flexible grouping; collaboration; culturally responsive teaching; and evidence-based content instruction. These practices are most effective when educators implement them within, rather than in place of, system-wide structures and processes that support identification, intervention, and differentiation (such as a multi-tier system of supports).

# HELPFUL TERMS

## [learning disabilities](#)

Brain-based disorders that result in learning challenges in particular skill areas, such as reading or math. Children with learning disabilities may also have trouble paying attention and getting along with their peers. Often referred to as LD, this general term includes students with dyslexia, dysgraphia, dyscalculia, and/or other language-based learning disabilities.

## [learning science](#)

The study of how people learn and how different kinds of environments, circumstances, mindsets, and approaches impact learning experiences.

## [least restrictive environment](#)

A setting that provides a child with appropriate opportunities to learn alongside non-disabled students, to the greatest extent.

## [modifications](#)

Changes in what a student is taught or expected to learn. Students who are far behind their peers may need changes to their curriculum. For example, a student could be assigned shorter reading assignments, or homework that's different from the rest of the class.

## [multi-tier system of supports \(MTSS\)](#)

A schoolwide framework for providing interventions to struggling students. MTSS includes universal screening for all students, targeted support for those who are struggling, data-based progress monitoring, and interventions that increase in intensity based on student need. MTSS is an umbrella term that can include response to intervention ([RTI](#)), positive behavior intervention systems (PBIS), and social-emotional learning instruction ([SEL](#)).

## [positive behavior intervention systems \(PBIS\)](#)

A data-driven approach for developing students' positive behavior. Initial screening and continuous progress monitoring are critical parts of the approach for *all* students. PBIS can go hand in hand with academic support systems such as [RTI](#) and is often part of a whole-child system such as [MTSS](#).

## [response to intervention \(RTI\)](#)

A system for screening, monitoring student learning, and providing evidence-based interventions of varying intensity based on student need. It is often the academic approach within a larger [MTSS](#) system.

## [self-efficacy](#)

The belief in one's own ability.

## [social-emotional learning \(SEL\)](#)

Instruction that develop students' [emotional intelligence](#), such as self-awareness, self-management, and relationship skills. SEL instruction is often implemented hand in hand with PBIS as part of a multi-tier system of supports.

## [special education](#)

Specially designed instruction and related services, provided at no cost to parents, to meet the unique needs of a child with an identified disability.

## [specific learning disability \(SLD\)](#)

One of the 13 categories of disabilities covered by IDEA. A disorder—unrelated to intelligence, motivation, effort, or other known causes of low achievement—that makes a child struggle in certain areas of learning, such as reading, writing, or doing math.

## [strategy instruction](#)

Instruction that teaches students cognitive strategies (e.g., summarizing, question generating, clarifying, predicting) and metacognitive strategies (e.g., self-regulation, executive functioning skills, self-monitoring of academic gains, memory enhancements) for learning content.

## [Universal Design for Learning \(UDL\)](#)

A framework for designing learning experiences in flexible ways to meet the needs of individual learners.