High-Leverage Practices

Teaching Students with Disabilities—and All Students Who Need a Learning Boost

By Mary T. Brownell, Stephen Ciullo, and Michael J. Kennedy

Jacqueline is a sixth-grade special education teacher whose school district recently decided to implement an inclusive approach to teaching and learning. Now special and general educators collaborate to provide a stronger system of instructional supports based on their analysis of students' data. Jacqueline and her colleagues are systematically supporting students with disabilities and others who are struggling in one or more academic or behavioral domains. After months of online learning due to the coronavirus pandemic, they now have a hybrid model in which students are on staggered schedules, coming to school two days a week. While some families have been able to adjust, many are experiencing a great deal of stress. More students than ever are slipping behind, acting out, and withdrawing. The whole sixth-grade instructional team has been searching for more effective practices to foster academic, social, and emotional development.

Jacqueline's sixth-grade general education colleagues have started to teach using modeling with think-alouds and strategies like summarizing text. They are also using specific scaffolds, including graphic organizers, to better accommodate students' learning needs. When working with students in small groups, Jacqueline reteaches strategies, models foundational skills necessary for successful participation in the general education curriculum, and helps her students learn to use accommodations that will support learning in both settings (such as text-to-speech software so that students who are still developing reading skills have access to grade-level content).

The changes Jacqueline and her colleagues are making seem to be working. Almost all the students with disabilities and the students who have been struggling during the pandemic are securing better grades and seem more motivated to participate in instruction. Many are even beginning to show their peers how to use strategies they learned in Jacqueline's small groups.

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ILLUSTRATIONS BY RACHEL SENDER

Jacqueline and her general education colleagues have always worked hard and been dedicated to their students, but in the past their instructional strategies were not well coordinated. As they started working together more closely to adopt the inclusive model, they also dug into research on how to accelerate learning. They found that agreeing on some foundational ideas—like collaborating so that core and supplemental instruction are tightly connected and being more specific about students' learning goals and the scaffolds the team would use to meet them—made a big difference in their team's day-to-day work and their students' development.

Jacqueline's experience is in keeping with what research has established: students with disabilities can achieve content-area standards and meet social and emotional milestones when they are consistently provided the instructional practices and accommodations that best support their learning. Decades of research have defined effective instructional practices that general and special education teachers can use to help students with disabilities, and students without disabilities who need additional supports, achieve better academic and social-emotional outcomes.[1] These well-researched, trustworthy instructional practices are freely available through national centers like the IRIS Center (iris.peabody.vanderbilt.edu) and the Collaboration for Effective Educator Development, Accountability, and Reform (CEEDAR) Center (ceedar.org), and in publications like Practice Guides published through the Institute of Education Sciences (ies.ed.gov/ncee/wwc/practiceguides).

The challenge for teachers, however, is translating the many research-based instructional practices that exist into daily classroom instruction. Classrooms are complex environments, and teachers must attend to many demands. Time to study, try out, and reflect on new practices is in short supply. And time to do so collaboratively as an instructional team is all too rare. To address this problem, the Council for Exceptional Children (CEC) and CEEDAR convened scholars, researchers, practitioners, teacher preparation faculty, and advocates to carefully review the literature and identify high-leverage practices that improve instruction across different content domains and grade levels for students with disabilities and for other students with learning differences. These practices, when used over time, are designed to support and enhance teachers' implementation of content-specific, research-based practices in such areas as reading, writing, mathematics, and social-emotional learning. (To learn more about these practices and the professional learning system that states, teacher preparation programs, and school districts ought to provide for general and special education teachers, see the companion article, "Systemic Support for Special Education: Making It a More Integral Part of General Teacher Preparation," which begins on page 18.)

What Are High-Leverage Practices?

High-leverage practices (HLPs) are instructional approaches educators in K–12 can use to teach different types of learners and content.[2] The working group convened by CEC and CEEDAR identified 22 such practices after spending 18 months engaged in the following process: discussing research on effective instruction, distilling that research into a manageable set of practices, incorporating feedback from several focus groups, presenting practices to the CEC representative assembly, and finalizing the HLPs with the CEC executive board. The group deemed the selected practices "high leverage" because they are foundational to effective instruction, they help with managing and intervening in students' behavior, and they support successful implementation of the Individuals with Disabilities Education Act (the legislation guaranteeing that students with disabilities receive a free and appropriate education with their nondisabled peers to the extent that is possible[3]). The 22 practices are organized into four essential aspects of teachers' work: collaboration, assessment, social/emotional/behavioral, and instruction. (For the complete list of practices, see page 15.)

Researchers, practitioners, faculty, and others identified 22 high-leverage practices that improve instruction.

In this article, we describe two HLPs that are foundational for delivering effective instruction: (1) use explicit instruction, and (2) provide high-quality feedback. Research shows that teachers can use these two practices in general and special education classrooms to improve student outcomes. In addition, they are a great starting place for implementing other HLPs. In describing these two HLPs, we provide examples of how teachers might use them. We also provide a list of resources teachers can use to support their implementation (see page 17).

Explicit Instruction

Explicit instruction (HLP 16) is one of the most well-researched HLPs for teaching students with disabilities in grades K–12. When teachers provide explicit instruction, they make clear for students how to engage in a particular skill, how to be strategic when they approach a task (such as solving a mathematics problem or summarizing a paragraph), or how to define a concept using examples and nonexamples. Explicit instruction has been shown repeatedly to promote skill learning in many domains, problem-solving approaches in mathematics, and strategic thinking in disciplinary literacy instruction.[4]

Most educators agree that explicit instruction includes the following components:[5]

- Break down (or segment) the learning task.
- Set clear, measurable, and feasible lesson objectives.
- Provide numerous opportunities for students to respond to prompts of varying difficulty, and deliver immediate feedback.
- Model by demonstrating and thinking aloud.
- Provide guided and engaging practice.
- Promote student independence.

In the following sections, we describe each component of explicit instruction and provide examples to support implementa-

tion. We suggest that teachers spend extra time learning how to engage in the explicit instruction component of *modeling*, as researchers have found that many teachers find modeling difficult and could benefit from additional professional development.[6]

Break down (or segment) the learning task. During planning, teachers break down a learning task by analyzing the concept, strategy, or skill and listing key steps needed to teach it. For concepts, they think carefully about an appropriate definition and select examples and nonexamples that will elucidate the critical features or dimensions of the concept when teaching.

Explicit instruction has been shown to promote skill learning and strategic thinking.

Here's an example from Jacqueline and one of the general education teachers, Tanisha; they want to use a graphic organizer to help students write persuasive essays. During a joint planning session, they list steps students need to learn in order to use a graphic organizer to map out ideas before writing. Jacqueline and Tanisha (1) decide how they will explain the graphic organizer's purpose; (2) set a measurable learning objective for each lesson; (3) script what they will say while thinking aloud—including the specific topic, examples, and nonexamples—when they model how to map out ideas with a graphic organizer; and (4) choose guided practice and independent practice activities to help students learn to use the graphic organizer. Jacqueline and Tanisha also consider scaffolds, such as speech-to-text software, that some of their students with disabilities may need to record their ideas.

Set clear, measurable, and feasible lesson objectives. This aspect of explicit instruction has been widely adopted. Many teachers begin every lesson by presenting an objective. The most effective approach is to provide a specific and measurable objective that can be accomplished in the time allocated for the lesson; they display the objective (e.g., on a dry-erase board), read it to the students, and discuss its importance. They also conclude each lesson by reviewing those aspects of the objective that were accomplished.

When introducing the graphic organizer for persuasive writing, Jacqueline and Tanisha explain to students that they will learn how to use a graphic organizer to develop a persuasive essay. They display and discuss the lesson objective: "Students will correctly explain to a partner the purpose of writing to persuade as well as how a graphic organizer can be used to organize key ideas and plan before we write." After introducing and discussing real-world examples of the genre and the purpose of persuasive writing, they explain each part of the graphic organizer, along with its function. Tanisha and Jacqueline provide several writing samples that include a graphic organizer and several others that do not. They then ask students to "explain to a partner the purpose of writing to persuade as well as how this particular graphic organizer will be used to organize ideas and plan before we write." To see if their learning objective has been met or if additional teaching is needed, Tanisha and Jacqueline close the lesson by assigning student pairs to report back on what they discussed.

Provide numerous opportunities for students to respond to prompts of varying difficulty, and deliver immediate feedback. A key element of explicit instruction is to provide students with numerous opportunities to respond to prompts. This both engages students in the learning process and enables teachers to assess understanding and learning. Teachers should be deliberate in terms of crafting opportunities to respond so they reflect the spectrum of difficulty (e.g., rote or deep/probing questions) and modalities (e.g., responses that are choral, gestural, individual, or written). Jacqueline and Tanisha use planning time to make decisions about what types of opportunities to respond each lesson will feature, and which individual students Jacqueline will focus on to demonstrate their learning. Wanting to ensure that Tanisha calls on many different students while she facilitates a whole-group discussion of which writing samples are or are not examples of persuasive essays, they decide she will use a system that helps keep students engaged: drawing popsicle sticks with students' names on them from a cup. Jacqueline and Tanisha also plan how they will provide students with immediate and specific feedback (the second high-leverage practice we discuss in this article). Feedback reinforces students' efforts and prevents them from unintentionally learning incorrect information.

Model by demonstrating and thinking aloud. Modeling includes the following steps: (1) demonstrating, (2) thinking aloud while demonstrating, and sometimes (3) presenting examples and nonexamples to reinforce learning. Although some educators assume that modeling is more applicable to elementary school, modeling is also relevant in grades 6–12, as well as in college and the workplace.* For instance, a 10th-grade history teacher can use modeling with a think-aloud to demonstrate some strategies for detecting bias in documents from a website. Steps may include demonstrating how to navigate to and within a website, describing the criteria he uses to evaluate a document for bias (such as looking for funding sources, for representation of multiple perspec-

*For more on the importance of modeling in schooling, see "'Cognitive Apprenticeship' Revisited" in the Fall 2020 issue of *American Educator*: aft.org/ae/fall2020/kirschner_hendrick.

tives, or for acknowledgements of limitations of the work), and thinking aloud while he applies that criteria to evaluate the credibility of different documents (e.g., news articles, speeches, or policy papers). Time spent in the modeling phase is determined by skill complexity (e.g., modeling a cursive letter for third-graders versus a multistep algorithm for students in precalculus).

Jacqueline and Tanisha model with a think-aloud to show students how to use their notes from the graphic organizer to compose sentences for their persuasive essays. Jacqueline begins the model by showing students how to take two words from her graphic organizer, "vegan options," to write an introductory sentence. Jacqueline states, "My notes are brief, but contain good ideas. My notes say 'vegan options' for the introduction to my paragraph. Hmm, how will I turn this into a great sentence? Well, what I believe is that there should be at least one vegan option each day. I'll write, 'I believe the time has come for students to have a daily vegan option for lunch.' I like my sentence because it conveys to readers where I stand!" To demonstrate, Jacqueline writes the sentence on the board as she talks through the process.

Provide guided and engaging practice. In this component of explicit instruction, teachers plan highly interactive practice activities to build students' proficiency. Teachers ask students multiple questions to assess understanding or provide multiple opportunities to demonstrate what they are learning by showing their work. Teachers then provide quality feedback on students' responses.

Tanisha and Jacqueline realize that many students will require considerable support to independently write a persuasive essay. Along with breaking down lessons for each step—use a graphic organizer to plan ideas, convert notes into an essay, and revise and publish their essays—they also conduct guided practice for each step. In one guided practice session, Jacqueline, Tanisha, and their students generate ideas and notes for the graphic organizer based on the prompt: "Should the voting age be lowered to 17?" Through discussion, the class decides that 17 years old is appropriate. They then brainstorm reasons to support their position. To give students more opportunities to respond, Tanisha and Jacqueline divide the students into two groups, with each teacher facilitating one group. (Once the pandemic is over and it is safe for students to sit close to each other, they plan to pair students for "turn and talk" brainstorming.) In Tanisha's group, two students argue that 17-year-olds are responsible enough to vote because they had obtained drivers' licenses at age 16, and doing so demonstrated responsibility. As the students talk, Tanisha provides suggestions to help limit how many words they use during note taking. The students then choose the following words for their notes, "license shows responsibility."

To support three students whose graphic organizers are only partially completed, Jacqueline breaks a few of the group's ideas into more specific questions to improve their understanding of and participation in the task. For example, one student says her older brother, who is 17, has a job and that means he is responsible enough to vote; she then argues for being able to vote as soon as you get a job or turn 18, whichever comes first. To engage the three students in consid-

22 High-Leverage Practices for K–12 Teachers

Teaching is complex—and that's reflected in these 22 HLPs. The practices, and the four aspects of teaching and collaboration that organize them, are complementary, and teachers often use several at once. The practices also have some intentional redundancy; because feedback is essential for all aspects of students' learning, it appears in both the social/emotional/behavioral practices and in the instructional practices.

For details on each of these practices, including videos showing the practices in real classrooms and a professional development guide, visit highleveragepractices.org.

Collaboration

HLP 1: Collaborate with professionals to increase student success.
HLP 2: Organize and facilitate effective meetings with professionals and families.
HLP 3: Collaborate with families to support student learning and secure needed services.

Assessment

HLP 4: Use multiple sources of information to develop a comprehensive understanding of a student's strengths and needs.
HLP 5: Interpret and communicate assessment information with stakeholders to collaboratively design and implement educational programs.
HLP 6: After special education teachers develop instructional goals, they evaluate and make ongoing adjustments to students' instructional programs.

Social/Emotional/Behavioral

HLP 7: Establish a consistent, organized, and respectful learning environment.
HLP 8: Provide positive and constructive feedback to guide students' learning and behavior.
HLP 9: Teach social behaviors.
HLP 10: Conduct functional behavioral assessments to develop individual student behavior support plans.

Instruction

HLP 11: Identify and prioritize long- and short-term learning goals.
HLP 12: Systematically design instruction toward a specific learning goal.
HLP 13: Adapt curriculum tasks and materials for specific learning goals.
HLP 14: Teach cognitive and metacognitive strategies to support learning and independence.
HLP 15: Provide scaffolded supports.
HLP 16: Use explicit instruction.
HLP 17: Use flexible grouping.
HLP 18: Use strategies to promote active student engagement.
HLP 19: Use assistive and instructional technologies.
HLP 20: Provide intensive instruction.
HLP 21: Teach students to maintain and generalize new learning across time and settings.
HLP 22: Provide positive and constructive feedback to guide students' learning and behavior.

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ering that assertion, Jacqueline asks a series of brief questions (starting with "Does having a job mean you are responsible?") and helps the students write their notes after each question. Once the class completes the graphic organizers, Jacqueline and Tanisha bring the whole class back together and provide feedback on ideas they generated. In their next planning period, they agree to create additional modeling and guided practice activities to help students learn how to generate text using ideas in their graphic organizers.

Feedback reinforces students' efforts and prevents them from unintentionally learning incorrect information.

Promote student independence. Teachers gradually remove support during the guided practice phase and plan continued practice opportunities for students to increase their proficiency and their ability to apply what they have learned in new situations.[7] Independent practice activities vary in length and format (e.g., independent practice with solving mathematics word problems versus with writing chemistry lab reports), and include immediate and corrective feedback, a return to modeling as necessary, or additional examples and nonexamples if a review is warranted.

Tanisha and Jacqueline allot 30-minute periods spread over several days for independent practice. Students choose a topic to plan and compose a persuasive response. Topics include (1) whether the local government should install solar panels on government buildings, (2) whether the local library should add a computer lab or an art studio, and (3) which historical figure should be honored with a statue at a local park. Jacqueline conferences with students based on their needs. For instance, one student watches Jacqueline model and share examples of using transition words like *furthermore*, *another reason*, and *besides* when introducing a new idea. Jacqueline teaches another student to improve his writing by using the thesaurus on his laptop. Noting that he used the word *obviously* twice in one paragraph, Jacqueline models using the thesaurus to choose a new word. He then practices using the thesaurus independently.

Importantly, Jacqueline and Tanisha recognize that some students benefit from ongoing review as the school year advances, including repeated modeling of the steps in writing persuasive essays and other instructional scaffolds. After several months, the process of using explicit instruction to specify how to use a graphic organizer for writing a persuasive essay resulted in increased performance and greater confidence among the students, including those with disabilities. When the students with disabilities used the graphic organizer combined with speech-to-text software to support their spelling and handwriting issues, their writing improved substantially.

Feedback

Feedback (HLP 8, under social/emotional/behavioral, and HLP 22, under instruction) is a powerful research-based practice teachers can use to improve students' learning and development—from understanding concepts to mastering skills to enhancing social interactions.[8] Feedback is a key feature of explicit instruction that occurs after a teacher has provided an opportunity to practice a concept, skill, or strategy that the teacher has modeled and explained. When used effectively, feedback can increase student motivation and effort toward a learning task and improve performance.

To be effective, teachers' feedback must be specific. Specific feedback incorporates these qualities:[9]

- Goal directed
- Constructive
- Immediate or timely
- Positive and respectful

Goal directed. Goal-directed feedback focuses on the academic or behavioral target students are working toward. The learning target should be important for student growth, based on assessment of student performance, explained to the student clearly, and, when possible, developed collaboratively with the student.

Two of Jacqueline's students have not yet been able to write a cohesive essay. To support them, she and the students are working toward writing strong, well-organized paragraphs that include a topic sentence and three to four supporting details. When providing feedback to one of her students, Sam, she notes he has developed a strong topic sentence because it introduces what the paragraph will be about, and he has two details that support it. Jacqueline also points out that the remaining two sentences contain details that are not related to the topic sentence and helps Sam generate two related details that he can write about. In addition to focusing on Sam's writing, Jacqueline tells him that he did a good job of working independently, a skill she has been trying to promote. Being more specific, Jacqueline tells Sam that she appreciates that he first asked his peers for ideas and also looked up information on the computer before asking her for help. She emphasizes that it will be important for Sam to continue to seek help on his own to continue growing as an independent learner.

Constructive. Constructive feedback helps students understand specific aspects of performance that are effective and specific aspects that need to be improved. In Jacqueline's work with Sam, she helps him understand what he has done to meet his learning and behavior targets—such as writing the topic sentence, adding two related details, and improving his work through independent strategies. Then, Jacqueline specifies what he needs to do to improve (replacing the unrelated details in his paragraph). Building on the initiative Sam took by trying to look up information on the computer, Jacqueline later follows up to help Sam learn more about online research. Such support and clarity usually motivate all students, especially those who have been struggling to learn.

Immediate or timely. Immediate feedback is ideal in supporting student learning, whether instruction is focused on academic content or behavior. For example, while Jacqueline is teaching a small group of students to capitalize proper nouns in their essays, she draws attention immediately to the students' errors. Jacqueline offers this real-time feedback in a helpful manner, with an encouraging tone, such as pointing to a lowercased name in a student's paragraph and asking what is missing. The same is true for improving behavior. Quickly pointing out that a student engaged in an appropriate behavior is a positive way to increase prosocial interactions. For instance, right after Marcel helped Sam with his writing, Jacqueline tells him that she liked how helpful he was being—and she notices over the next week that Marcel is more frequently helping other students in the class.

Immediate feedback is not always possible, especially in general education classrooms where teachers are working with a large group of students on tasks such as extended writing or applying a summary strategy while reading with their peers. In these instances, teachers will want to provide feedback as soon as possible.

For the general education students' persuasive essays, Tanisha chooses to provide written feedback on their long-term learning goals: organization, use of details, capitalization, and appropriate punctuation. Tanisha also provides written feedback when her students are honing their ability to summarize. Once her students are ready for independent practice, Tanisha has them underline the topic sentence and then highlight ideas that supported it before writing a 10- to 15-word summary. That approach gives Tanisha insights into the students' thinking, allowing her to provide written feedback on whether they were able to identify the topic sentence and related ideas before they write their summaries. It also helps Tanisha identify what additional instruction the students need (such as a repeated modeling lesson or additional background knowledge and vocabulary).

Positive and respectful. Positive and respectful feedback helps students feel that their efforts are worthwhile and appreciated by the teacher. Teachers should acknowledge students' efforts as well as their correct answers and prosocial behaviors. For instance, Jacqueline often tells students she notices they are working well with their peers to read a passage; she appreciates the way they are taking turns and praising each other for reading

Resources to Support Teachers

Teachers strive to help all their students achieve their potential academically and grow into caring, responsible community members. But schools rarely have the resources to meet students' needs—much less offer the enrichment all students deserve—and now the coronavirus pandemic is causing enormous social, emotional, and economic strains. As teachers seek to accelerate students' learning and promote positive interactions, they will find that engaging in explicit instruction and offering timely, supportive feedback are highly effective practices.

Explicit Instruction

- This video operationalizes the explicit instruction HLP. The video includes definitions of key components of explicit instruction and provides classroom examples: highleveragepractices.org/701-2.
- A companion to the book *Explicit Instruction* by Anita Archer and Charles Hughes, this website contains video exemplars and other resources to implement various elements of explicit instruction: explicitinstruction.org.
- These three videos illustrate how elements of explicit instruction and feedback are used to implement other HLPs and evidence-based practices:
  - HLP #18: Use Strategies to Promote Active Student Engagement, highleveragepractices.org/701-2-5.
  - HLP #7: Establish a Consistent, Organized, and Respectful Learning Environment, highleveragepractices.org/701-2-4-2-2.
  - HLP #17: Use Flexible Grouping, highleveragepractices.org/701-2-4-3-4.
- The National Center on Intensive Intervention offers online modules that schools can use for professional development in explicit instruction. The course includes activities that could serve as a review for experienced teachers or as a helpful starting guide for new educators: intensiveintervention.org/implementation-support/course-content.
- When teachers first start modeling, they often find it hard to think aloud in a clear, effective way while also demonstrating what they are doing. This video shows a teacher modeling a writing strategy using "self-talk" to promote regulating thoughts and behavior during a tricky learning task: youtube.com/watch?v=aVCUJiw7Ml8.

Providing Feedback

- This video is intended to operationalize feedback; it defines the components of effective feedback and provides examples of teachers using feedback to improve student performance: highleveragepractices.org/701-2-3.
- This video presents three teachers providing effective feedback in reading and writing. In these videos, you can see teachers providing different components of feedback, including timely feedback that is goal focused and constructive: youtube.com/watch?v=0DAeiBB6zT0.
- Showing two teachers providing effective feedback in reading and mathematics, this video is a great demonstration of teachers telling students what they did well and providing corrective feedback. The second teacher also uses feedback to help the student generate ways to improve: youtube.com/watch?v=mEgVL-nZqFg.

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carefully. Likewise, when students are decoding multisyllabic words but need additional help, Jacqueline is careful to focus on their efforts. She often makes remarks like, "Oh, that was an interesting way to sound out the word, let me show you what I would do."

To provide constructive feedback, it is most effective to focus only on what students did well and what they need to do to improve—and to avoid criticizing the quality of their efforts. For instance, when a student, Zara, gets stuck solving a word problem, Jacqueline tells her that she did a fine job of reading the mathematics problem aloud and then paraphrasing the question; Jacqueline then reminds Zara that she would find it easier to solve the problem if she drew a picture representing it, as Jacqueline taught the class to do earlier that week. Seeing that Zara looks confused, Jacqueline remodels how to represent the problem in a picture.

Explicit instruction and feedback stand out as *must-have* practices to produce strong outcomes for the broadest range of students.

These high-leverage practices provide an excellent road map for K–12 educators to consider when designing and implementing instruction for students with disabilities and others who need additional supports. Although all HLPs are important for teachers' tool belts, use of explicit instruction and feedback stand out as *must-have* practices to produce strong outcomes for the broadest possible range of students—including large numbers of students who have fallen behind as a result of the pandemic. As noted above, educators can use explicit instruction and feedback across the day to teach just about any content, and then give students positive, timely information about the extent to which they are meeting expectations. But explicit instruction and feedback are not standalone practices.

Systemic Support for Special Education

Making It a More Integral Part of General Teacher Preparation

BY MARY T. BROWNELL, LYNN HOLDHEIDE, MARGARET L. KAMMAN, AND ERICA D. McCRAY

Aditi is a first-year, eighth-grade social studies teacher. She's looking forward to honing her practice, but she's one of several new teachers hired just a couple of weeks before classes started. Perhaps not surprisingly, student achievement at this middle school has been far below the district and state averages for many years. Just in her first-period class, more than 50 percent of her 30 students are performing below proficient on the state assessments in reading and social studies, and seven of her students have documented disabilities. In her four other periods, achievement is similar, class sizes range from 26 to 32, and the numbers of students with disabilities range from five to seven.

Aditi is concerned because during her teacher preparation, she received little training and experience in working with students with disabilities. She believes students with disabilities would benefit from her class because they will have more opportunities to learn challenging curriculum and interact with their peers, but she feels unprepared to integrate effective strategies for these students in her instruction or to leverage the expertise of her special education colleagues.

Experiences like Aditi's resemble those of many new teachers—but they shouldn't given the long-standing push to educate students with disabilities in inclusive environments. In 1975, Public Law 94-142 provided legislation guaranteeing a free appropriate education to each child with a disability in the least restrictive environment. As of 2016, 63 percent of school-aged children served under the Individuals with Disabilities in Education Act (formerly Public Law 94-142) were educated inside the general education classroom for at least 80 percent of the day.[1]

Inclusion of students with disabilities in general education classrooms has been encouraged due to research showing benefits for students with disabilities and advocacy by the disability community. For instance, in a large-scale analysis of national achievement data, researchers found that time spent in general education predicted higher reading and mathematics achievement for students with disabilities ages 6 through 9.[2] Further, students with disabilities who earned 80 percent or more of their high school credits in general education classrooms were far more likely to enroll and persist in postsecondary settings.[3] Inclusion promotes other nonacademic outcomes that enrich the quality of life students with disabilities experience in and out of school, such as friendships and improved social skills.[4]

Despite inclusion's benefits, the preparation of and support for teachers to educate students in inclusive environments has been insufficient. Research shows that general education teachers are often not

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To implement explicit instruction, teachers must also be able to establish consistent, organized, and respectful learning environments (HLP 7); otherwise, they will be unable to accomplish any instruction. They also must be able to identify and prioritize long- and short-term learning goals (HLP 11), if they are to focus their explicit instruction, and be able to promote active student engagement (HLP 18), if they are to create highly interactive instruction that helps students learn. Because all 22 HLPs reinforce each other but cannot be learned simultaneously, we recommend that educators looking for a logical entry point to adopt the HLPs begin with explicit instruction and feedback. These key practices serve as a strong foundation for other HLPs and are essential elements of many content-focused, research-based practices, such as teaching decoding in a systematic manner and encouraging positive behaviors. ☐

Endnotes

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prepared to teach students with disabilities and tend not to employ instructional practices that support the learning and social-emotional development of students with disabilities.[5] Fortunately, some progress has been made. For example, recent observation studies of reading instruction show that teachers' use of explicit phonics instruction and comprehension strategies has increased[6] (which empirical research has shown to improve the reading achievement of students with disabilities). Still, the field has a long way to go to help general education teachers learn to use research-based practices effectively.[7]

Teachers' lack of preparation to educate students with disabilities—and the overall lack of systemic support for excellence in special education—is reflected in the outcomes students with disabilities achieve. On the National Assessment of Educational Progress, average reading scores for fourth-grade students with disabilities have remained "below basic" since 1998. Average mathematics scores for fourth-graders with disabilities have hovered right around "basic" since 2003.[8] Outcomes for students with disabilities who are living in poverty or who speak a language other than English are even more dire.[9]

To reverse this trend, general education teachers must be knowledgeable about integrating research-based strategies for students with disabilities into their daily instruction and understand how to contextualize instructional practices to support student differences in language and culture. They also must be provided with the time, space, and materials to effectively collaborate with special education teachers, other professionals, and families to support the multifaceted needs that many students with disabilities exhibit. General and special education teachers clearly need a sophisticated set of knowledge, skills, and dispositions to optimize learning in inclusive classrooms. Because this expertise cannot truly be cultivated in the relatively short time they spend in preparation programs, they will need access to coherent learning opportunities that extend beyond initial preparation well into their careers. In short, they need to participate in a professional learning system. ☐

Endnotes

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For a detailed discussion of this professional learning system—including changes that states, teacher preparation programs, and school districts need to collaboratively enact and examples of state teams starting to do this work—continue reading this article at go.aft.org/bhkm.