Differentiated Instruction & Other Tools to Help At-Risk Learners

Students often bring learning differences to their general-education classrooms that can make school extra-challenging for them. Children might have social-emotional concerns, gaps in learning, difficulty processing language, or other limiting factors that interfere with academic performance. Yet, the classroom teacher may not be aware that these factors are impacting the learning of some of their students. And even if such information is available, the instructor lacks time and resources to create individualized plans for every potentially at-risk learner. To ratchet up concern even more, there is mounting evidence that interruptions to K-12 education across the country due to the Covid-19 pandemic are driving up the number of students with academic deficits (Kuhfeld & Tarasawa, 2020)—a development that will likely only increase instructional demands on educators in the near future.

And yet schools need to find a constructive response. One positive step is for teachers to make full use of an efficient toolkit of 5 research-based instructional strategies appropriate for the entire class: (1) differentiated instruction, (2) scaffolding, (3) opportunities to respond, (4) wait time, and (5) choice-making. These strategies have been found to be highly effective in increasing academic engagement and success for students of all abilities. The remainder of this article reviews each strategy and provides guidance and examples for its use.

**Differentiated instruction.** General-education teachers set learning objectives that they expect will be reached by all students in the class. However, not all learners have the same background knowledge, skills, work habits, or level of motivation. So, instructors use differentiated instruction: instructional techniques matched to individual need that are intended to help a student to attain grade-appropriate academic success. Differentiated instruction can be employed with groups or individual students who might benefit from additional instruction, supports, and/or adjustments to master a learning objective.

Differentiated instruction does not ‘dumb down’ teaching or hold a struggling student to a lesser academic standard than their general-education classmates. Instead, the teacher considers a range of techniques intended to enable the student to attain grade-appropriate academic success. For example, an instructor might reduce the volume of information or work presented to the student in each session (instructional pacing), explore different methods to present information (e.g., read independently, listen to the work read aloud, watch a video), or allow the student equivalent means to communicate what they have learned (e.g., write out answers or recite answers orally on a math number-problems worksheet) (Billingsley, 2016). So, while differentiated instruction may take an alternative path, its goal is still for the at-risk student to achieve the same rigorous class-wide learning objective as their peers.

Differentiated instruction works well with groups. As students learn new academic material or skills, they progress through 3 predictable instructional stages:

1. **Direct instruction.** The student receives teacher instruction, demonstration, and modeling in the new skill or content.
2. **Supervised practice.** The student practices the skill/content while observed by the instructor, who offers specific performance feedback, praise for effort and appropriate performance, and encouragement to motivate.
3. **Independent practice.** The student practices the skill/ applies content independently, individually or with peers.

When educators are in the midst of presenting a new learning objective to their class, they can set up differentiated instructional groups at these 3 levels to support students currently working at different stages in the instructional progression (Billingsley, 2016):

**Group 1: Direct instruction.** This group typically requires the largest amount of teacher time and receives direct teaching or reteaching of the target learning objective. Practice activities tend to be short in duration, often with verbal coaching or other teacher support.

**Workshop materials available at:** https://www.interventioncentral.org/goshen
Group 2: Supervised practice. These students may receive a brief ‘re-teach’ of the learning objective. Also, the teacher may provide demonstration and coaching if needed to get students started on a practice activity before having them finish on their own. The instructor checks in to give timely performance feedback at the conclusion of any practice activity.

Group 3: Independent practice. These students work on practice activities on their own. Teacher attention is minimal, often limited to getting the group started and briefly checking in at the end. Students may check their own work or engage in cooperative learning activities with group peers. Another instructional option for this group is to practice the learning objective using academic software.

**Scaffolding.** Scaffolds are temporary supports given to students to help them to achieve success on new or challenging academic tasks (Billingsley, 2016). As the student progresses, these scaffolds are gradually removed. The end goal is for the student to perform the academic task with a level of independence appropriate for their grade level. Scaffolds are commonly used with virtually all students when learning new content, concepts, or skills. Examples include graphic organizers, reading-comprehension guides, and word banks. Table 1 lists examples.

<table>
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<tr>
<th>Giving Directions</th>
<th>Note-Taking</th>
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<td>Provide written as well as oral directions.</td>
<td>Give students a copy of class notes. During the lecture, cue students on what sections or specific terms they should highlight.</td>
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<td>Follow this proactive 3-step directions sequence: (1) Students read directions independently; (2) The teacher reads the directions aloud and checks for understanding; (3) A student volunteer is called on to restate the directions to the teacher.</td>
<td>Give students a set of guided notes (a complete set of notes with key vocabulary and definitions left blank for the student to fill in during the lecture or lesson). During the lesson, cue students when they need to fill in specific sections.</td>
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<td>Previewing</td>
<td>After a lesson, give the student a copy of the accompanying class notes. Students are to review class notes, use them to expand, correct their own notes, and then return class notes.</td>
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<td>On a math sheet with mixed operations (addition and multiplication), have students pair off to preview each number problem, point to the operator and state whether it is an additional or multiplication sign.</td>
<td>Academic Work</td>
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<td>Before the group reads an assignment independently, have a more accomplished reader preview the passage with the group: (1) the stronger reader reads a sentence aloud then points randomly to a student; (2) that student immediately reads the same sentence aloud while the rest of the group follows along silently; (3) this process is repeated with the remaining sentences until the passage preview is completed.</td>
<td>Reduce the length or frequency of instructional or independent-work periods (e.g., divide 30-minute work block into two 15-minute blocks with engaging activity between).</td>
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<td>Give members of the group a ‘task card’ listing steps to follow to complete an assignment independently.</td>
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<td>Allow students to respond orally or point to an answer rather than writing it down.</td>
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<td>Errorless learning: When posing a question to a student or the group, include within the question the information required to answer it. For example, a teacher may say, “5 x 8 = 40. What is 5 x 8?”, or “Apple starts with the /æ/ sound. What sound does apple start with?”</td>
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Scaffolds can be customized to meet the needs of different students working on the same task. In a group learning to write their letters, for example, the teacher may provide one learner with an alphabet look-up sheet to use as a model while copying. At the same time, a second student in the group may be given the more structured scaffold of a dotted-line letter-font worksheet to trace her letter shapes.

**Opportunities to respond.** Students show accelerated learning when they are given increased opportunities to respond (OTRs) to academic material. OTRs include any active student response appropriate for a lesson, such as answering teacher questions, reviewing math-fact flashcards with a classmate, or using a highlighter to underline key ideas in an informational passage. Research suggests that students learn optimally during a lesson or activity when they are given 6 to 8 OTRs per minute (Billingsley, 2016).

One way to increase all students’ opportunities to respond is to use various group-responding methods, such as choral responding, response cards, and white boards.

- **In choral responding,** the teacher poses a question, and the entire class responds orally. (Note: If some students appear to be mouthing a response but not actually participating, the teacher can use a mixed-responding approach: Along with choral-response questions, the instructor occasionally—and unpredictably—calls directly on an individual student).

- **Response cards** are cards or sheets with pre-printed response items. For example, if students have YES/NO response cards, the teacher poses a series of yes/no questions and students respond to each as a group by holding up their cards and pointing to YES or NO. Or for a math lesson, student have a response card/sheet printed with a 0-10 number line. The teacher calls off decimal numbers between 0 and 10 and students respond by pointing to the number’s approximate place on the number line.

- **Students can also be given a white board** and erasable marker. The teacher calls out a word to spell or math fact to solve, and students then write their answers and hold them up for the teacher to scan.

**Wait time.** Teachers using wait time insert a several-second pause between their question and a student response (Haydon et al., 2009). Wait time can allow students who lag in responding—such as those with language or processing issues—sufficient time to come up with a correct response.

When using wait-time, the teacher simply poses a question to a student, group or the class, pauses for 3-5 seconds, then asks for the response. Wait time works best when students understand its use. For example, a teacher may say to a reading group, “I am going to ask questions about the story we just read. When I call your name, think of an answer to the question I give you. Don’t give your answer until I tell you to.” Wait time can also be combined with choral responding. For example, the instructor may say to the class, “I am going to hold up cards with letters. When I hold up a letter, think of its name. When I give the signal, call out its name.”

**Choice-making.** Academic choice-making opportunities are those in which students are offered at least 2 options to select from and can make their choice on their own (Lane et al., 2018). Choice opportunities have been shown to foster student engagement, encourage active rather than passive learning, and promote improved classroom behaviors. Teachers can offer choice either within a single shared task (e.g., letting students handwrite or type an essay) or across several tasks (e.g., telling students that they can work on several short seatwork assignments in any order they choose).

| Table 2. Examples of Choice-Making Opportunities (adapted from Lane et al., 2018) |
|------------------------------------------|------------------------------------------|
| Choice within a single task | Choice across several tasks |
| • Choose any 5 math problems to complete from a 10-item homework sheet | • Decide in what order to complete several assigned seatwork academic tasks |
| • Choose what art supplies (colored pencils, crayons, pastel sticks) to use in coloring a map | • Select one task-option for summarizing the water cycle: (1) written report, (2) PowerPoint |
• Pick a book from several options for a book report presentation, (3) poster

Of course, teachers should employ only those choice opportunities that are manageable in their instructional setting. In one classroom, for example, the teacher might be comfortable allowing students to choose where they sit or whom they work with on a cooperative-learning assignment. In another classroom, however, these same choices may create disruption and should be avoided.

Teachers can fit choice-making into their instructional-planning routine by creating a ‘choice menu’. First, the instructor lists the common learning situations (i.e., teacher-led, small-group, and independent activities) that occur daily in their classroom. Then, next to each activity, the instructor can list meaningful student choices they might offer.

References


Think-Pair-Share and Variations

Think-Pair-Share (Frank Lyman, et al, 1981) is a collaborative discussion strategy designed to provide students with time to think and formulate their individual thoughts and ideas about a given topic or concept before forming a pair with a peer to share their thinking. It gets its name from the three stages of student action which emphasizes what the students are DOING at each of those stages.

Students individually THINK for a few moments about the prompt or question or observation the teacher provides to engage them.
Students form a PAIR with another student to talk and compare their response to the prompt. They come to a consensus about a collective response to the prompt.
Student pairs SHARE their thinking with the rest of the class as the teacher randomly calls on them or asks for volunteers to share.

Think-Pair-Share encourages student participation from all students and promotes individual and peer accountability. Because the strategy holds students accountable for having something to share with their peers, it helps keep students on task and reduces pressure reluctant students might have about responding in front of the whole class. There are many variations of Think-Pair-Share and some examples are provided below.

Think-Pair-Share provides “think time” which can increase the quality of student responses. Because the strategy can be used at any time during the lesson, it provides students with an opportunity to think and process new ideas and information and forces them to make sense of those new ideas in light of their prior knowledge. Student misunderstandings and misconceptions about the topic or concept are often revealed and resolved during discussions with student peers. Research shows that the quality of student responses increases significantly when provided time to think. In addition, research shows that students need time to mentally “chew over” new ideas in order to store them in memory. Using Think-Pair-Share and variations of the strategy at various points throughout the lesson or unit of study promotes student understanding and retention of the information.

How to implement the strategy:

1. Have groups of four students number themselves from 1 to 4 or have students use strategies such as Clock Buddies or Seasonal Partners to form pairs.
2. Provide a prompt, topic, or problem to solve. (i.e., “How might we determine if 7th grade boys run faster on average than 7th grade girls?” Or “What are some ways we might reduce the waste in our school?”)
3. Give students a minimum of ten to fifteen seconds to THINK about the prompt and formulate their responses.
Note: Teachers need to gauge the time students need to think critically about the prompt and formulate a response. They need adequate time to think and formulate responses.

4. Assign pairs by announcing which student numbers will be partners (i.e., Students 1 and 2 will be partners and students 3 and 4 will be partners.)
5. Have students PAIR with their partner.
6. Have the student with the lowest number SHARE their response with their partner while the other student listens.
7. Have the students switch so the student with the highest number shares while their partner listens.
8. Encourage the students to discuss the topic as needed to ensure mutual understanding of the prompt.
9. Rotate around the room as students share and listen for misunderstandings or misconceptions students may have about the content to address with the whole group as well as interesting ideas or thoughts that can benefit the whole class.
10. Ask for pair volunteers to share their thoughts with the rest of the class.

Variations:

- **Think-Write-Pair-Share**: Have students write their ideas in their notebooks before turning to a partner to discuss them.
- **Think-Pair-Square**: Student pairs form a square and share with another pair AFTER they have completed Think-Pair-Share.
- **Think-Draw-Share**: Students draw their own ideas before they pair up to discuss them with a partner.
- **Formulate-Share-Listen-Create**: Students individually formulate their own response to the prompt or question. They take turns sharing their responses with each other while listening carefully to their partner’s response to note similarities and differences to their own response. Then they work with their partner to create a new response to the prompt that incorporates the best of both ideas. Students share their ideas with the whole class as asked by the teacher.
- **Mix-Pair-Share**: Students silently mix and mingle around the room with no talking. When the teacher says “Pair,” the students stop and form a pair with the person closest to them. They shake hands and stand together. The teacher provides the prompt and gives students time to think. Students take turns sharing their responses with their partner. Teachers may have the students thank their partner and repeat several times with a new prompt each time. Teachers may opt to play music while students are mixing and mingling around the classroom and have it stop when it’s time to form a pair, think, and share.
- **Think-Tweet-Share**: Have students think about the prompt and develop a tweet response or tweet representation that is no more than 140 characters to share globally.
- **Think-Text-Share**: Have students think about the prompt and text their response to their partner (if cell phones are allowed in class).
• **Think-Pair-Wordle-Share**: The teacher poses a question such as “What are all the words you can think of to describe “waves” (process, action, thing, person, etc.). Students are given time to think individually and then they form a pair to share their ideas and develop one Wordle between the two of them to share with the group.

• **Think-Blog-Respond**: Students think of various ideas for blog postings and create a post. The partner reads the blog post and responds.

• **Timed-Pair-Share**: Give each student sixty seconds to share and call time so the other partner knows when it’s time to share. This can be very helpful if one person in a pair is monopolizing the sharing time.

**Additional Resources:**

