

Whole-Group Response Strategies to Promote Student Engagement in Inclusive Classrooms

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Students with learning disabilities are often educated in inclusive classrooms alongside their typically developing peers. Although differentiated small-group instruction is ideal for students with learning disabilities, whole-group instruction continues to be the predominant instructional model in inclusive classrooms. This can create major challenges for teachers as they aim to actively engage all students, including students with learning disabilities. There are variations of whole-group response strategies, however, that teachers can use to accommodate a range of individual student needs. Collecting formative assessment data during whole-group instruction also can inform instructional decision making.

To be successfully included in general education settings, students with learning disabilities must have a sense of belonging. Many teachers may find it challenging to actively engage all students, including students with learning disabilities who struggle with academic risk taking and perseverance, resulting in lower levels of participation and peer interactions (Gurganus, 2007; McIntosh, Vaughn, Schumm, & Haager, 1994). Students

with learning disabilities face challenges across subject areas due to deficits in organizational skills, higher-order thinking, working memory, retention, and making connections (Alloway, 2011; Gurganus, 2007; Montague, Krawec, Enders, & Dietz, 2013). Despite the success of various research-based academic interventions, many students with learning disabilities require additional help understanding how to assess their own level of comprehension as well as how to approach active engagement in learning (Montague, Warger, & Morgan, 2000).

Although small-group differentiated instruction has been demonstrated as particularly effective for students with learning disabilities (Kim, Linan-Thompson, & Misquitta, 2012; Montague & Rinaldi, 2001), whole-group instruction continues to be the predominant instructional model in inclusive classrooms (DiCarlo, Pierce, Baumgartner, Harris, & Ota, 2012). Given how often whole-group instruction is implemented, teachers should strive to incorporate strategies that increase opportunities for student participation, engagement, and self-evaluation. Teachers can use a

continuum of strategies during whole-group instruction to maintain student engagement, gather information to inform future instruction, and monitor student progress. This continuum ranges from proactive strategies that promote engagement to reactive strategies in response to students who become disengaged (Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008). Although the continuum of strategies is needed to address student learning and behavioral needs, proactive strategies are preferred because they maintain active learning and have potential to prevent problematic behaviors.

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Proactive strategies encourage active engagement of all students, including students with learning disabilities (Reglin, Akpo-Sanni, & Losike-Sedimo,

2010). Specific examples of proactive strategies that can be implemented during whole-group instruction include proximity, high rates of opportunities to respond, high-probability requests, and choice making (Wehby & Lane, 2009). For example, whole-group questioning-and-response systems include proactive strategies, such as high rates of opportunities to respond and high-probability requests, by prompting all students to participate through verbal, gestural, written, or digital modes of responding. Such proactive strategies are important during whole-group instruction in inclusive classrooms, where traditionally the number of opportunities to respond is limited due to prompting techniques that rely on individual student responses (Maheady, Michielli-Pendi, Harper, & Mallette, 2006). Given that high-achieving students are more likely to volunteer responses than students with learning disabilities, finding ways to question all students can promote student interest in learning, activate prior knowledge, and improve comprehension in an inclusive manner (Maheady et al., 2006).

When implemented effectively, proactive whole-group instruction can help students with learning disabilities feel they belong in the learning community and provide opportunities for peer interaction and active participation (McLaughlin & Allen, 2009). Further, whole-group response systems create a method by which teachers can track student participation and measure current performance or understanding of all students at the same time through formative assessment. Formative assessment occurs during instruction, has low or no stakes attached to it, and is intended to inform teachers' future instructional decisions (Cornelius, 2013). This type of assessment means more than simply tracking if students with disabilities are "on task." Teachers should also measure how students engage in their own learning during whole-group instruction. For example, teachers can

monitor progress on students' individualized education program (IEP) goals and evaluate their learning of curriculum standards in the general education classroom (Alexandrin, 2003). The goal of tracking active student engagement is to capture evidence of opportunities for students to answer questions, work with peers, and complete tasks independently (Maheady et al., 2006), which are all necessary if students with learning disabilities are to find success in inclusive classrooms.

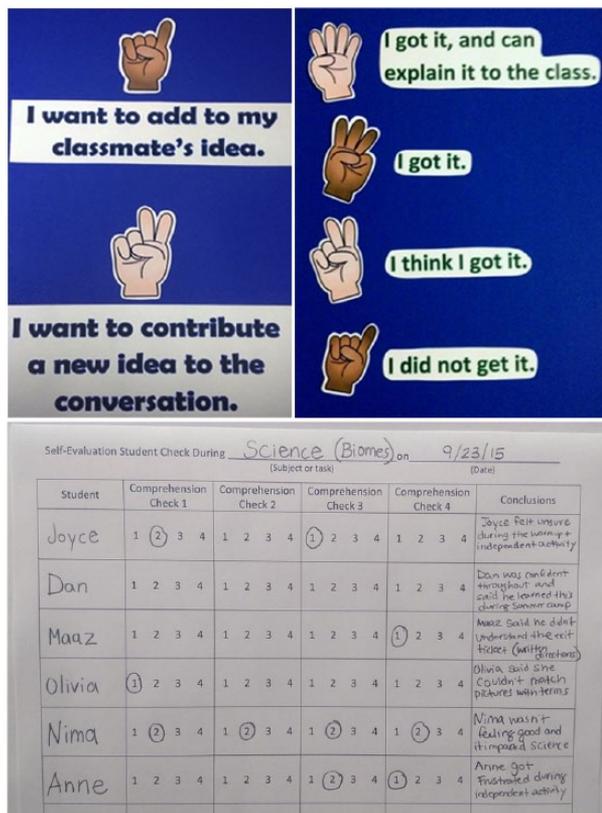
There are ways teachers can effectively include students with learning disabilities in whole-group instruction. Specifically, variations of whole-group response strategies can accommodate a range of individual student needs. Hand signals, response cards, and written response strategies are three possible response strategies. In addition, collecting formative assessment data during whole-group instruction can inform student

groupings, identify areas of relative need and strength, and track progress toward IEP goals.

Whole-Group Responding Through Hand Signals

Hand signals can be used to promote student engagement and check for comprehension. For example, teachers can use a hand signal strategy to facilitate class discussion. Specifically, teachers can guide discussion by selecting students who want to share new ideas (students holding up one finger) or add to the current idea (students holding up two fingers), as illustrated in Figure 1. This strategy can prevent the discussion from veering off topic and allows teachers to ensure a comprehensive discussion of one idea by selecting students who want to add to the same point before moving on to a new idea. This strategy is a way to scaffold the discussion because students must consider not only what

Figure 1. Hand Signals With Example Tracking Chart



Note. See <http://trackstudentlearning.weebly.com> for customizable tracking charts.

they want to share but also how their idea contributes to the conversation. Scaffolding in this manner increases comprehension for students with learning disabilities by targeting both cognitive and metacognitive development (Frey & Fisher, 2010).

Whole-group hand signals also can be used to check for comprehension. Comprehension checks using whole-group hand signals can help teachers redirect the lesson before students become frustrated or disengaged. This type of whole-group responding also promotes engagement because it holds students accountable for their learning by asking students to self-evaluate and reengage in the learning process. Comprehension checks are important for students with learning disabilities, who can be left behind during a lesson because they struggle with working memory or the ability to simultaneously store and process information to complete cognitive tasks (Alloway, 2011; Dehn, 2008).

Incorporating comprehension checks into a lesson at specific points allows teachers to note patterns of student comprehension surrounding specific concepts (Berry, 2006). Teachers who use hand signals to facilitate comprehension checks should include a scaled response system similar to the four-point system illustrated in Figure 1 rather than a dichotomous “I understand” or “I don’t.” Valuable learning can occur when students reflect upon their own learning to offer a degree of understanding rather than being asked discreetly, “Do you understand?” or “Does this make sense?” (Haydon, MacSuga-Gage, Simonsen, & Hawkins, 2012). Special educators can create peer discussion opportunities for students based on the degree to which they understand. Students who feel confident to turn and teach a classmate can pair up with those who are not sure if they understand a given concept (Maheady et al., 2006). By engaging in peer learning opportunities, students with disabilities can hear classmates use age-appropriate language to emphasize the concepts taught and self-correct their own thinking (Fuchs

& Fuchs, 2005). Teachers can use this opportunity to measure student learning and understanding of concepts by listening to student conversations and jotting down notes on the formative assessment template they are using to monitor understanding (Alexandrin, 2003; Cornelius, 2013).

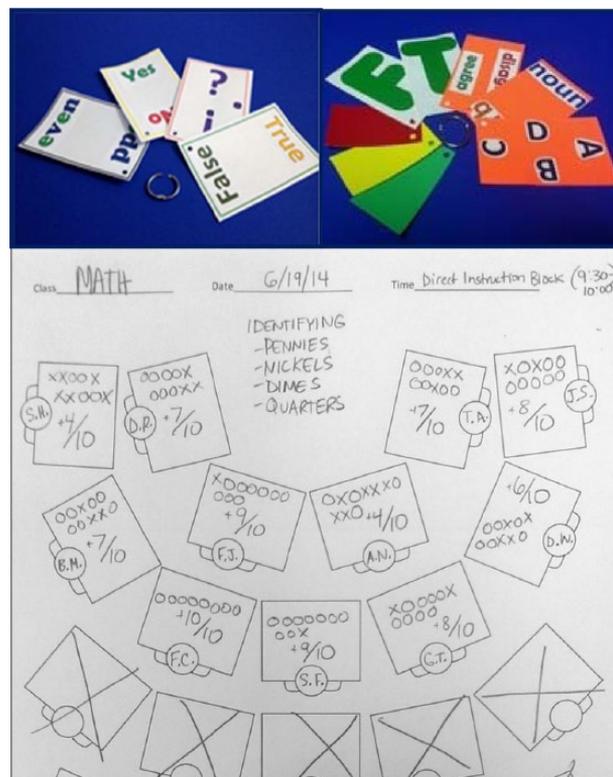
Capturing information using formative assessment charts allows teachers to make decisions about future lessons; this is otherwise known as *assessment-driven instruction* or *data-based decision making*. In the example in Figure 1, the teacher collected information about students’ self-reported comprehension levels. The teacher noted repeated comprehension issues (students who responded using 1s and 2s), and also noticed that both Anne and Joyce struggled during independent tasks throughout the lesson. In this case, the special educator can co-plan with the general educator to build in a small-group preteaching opportunity to model independent tasks for Anne and Joyce. The information collected helped the teacher notice students who needed greater levels of support to feel

confident about independent tasks during whole-group instruction. To access, download, customize, and print the formative example chart illustrated in the example in Figure 1, visit <http://trackstudentlearning.weebly.com/>.

Whole-Group Responding Using Response Cards

Teachers often use whole-group responding by posing a question in which all students verbally answer in unison, also known as *choral responding*. However, it can be hard to track individual student accuracy during choral responding, and students with learning disabilities who lack confidence can become passive learners. In some instances, students will not participate at all when prompted to respond verbally (Berry, 2006). One alternative to verbal or choral responding that has been shown to increase student participation is the use of response cards (Randolph, 2007). Response cards involve students holding up cards with predetermined answers to respond to a teacher-initiated prompt, eliminating the need for verbal or written responding. Many

Figure 2. Response Cards With Student Tracking Chart Example



students with learning disabilities struggle with writing mechanics, such as handwriting, spelling, vocabulary, and text structure (Gregg & Mather, 2002). When students face such challenges, teachers can use response cards to encourage active participation.

Figure 2 provides examples of flashcard-sized response cards that can be used with a wide range of students and situations. Response cards can be true–false or multiple choice or more content-specific, such as a set of graphemes, vocabulary words, parts of speech, or story elements. Response cards can even be a list of key words that students hold up during a multistep problem to further monitor comprehension and sustain student attention, particularly students with learning disabilities who struggle with organizational skills and making connections (Alloway, 2011; Montague et al., 2013). The purpose is to create a positive learning community so all students, including students who would otherwise not participate, have frequent opportunities to respond and actively learn (Heward et al., 1996).

Some students may require additional wait time or prompting to generate a correct response (Johnson & Parker, 2013). Peer supports and wait time can be used during response-card activities to address the needs of students with processing delays. For example, think–pair–share—where students think through their response, express their reasoning to a peer and obtain immediate feedback on their understanding, and then share their response card out in the whole group—has been found to sustain engagement and enhance critical thinking (Tyminski, Richardson, & Winarski, 2010). Students with learning disabilities, who may lack metacognitive skills, can be taught appropriate peer-to-peer interactions during whole-group instruction by reviewing a “look, lean, and whisper” approach (Archer, 2008).

Figure 2 also illustrates how student data, including response and accuracy rates, can be collected during whole-group instruction that includes response cards. Tracking the rate and

Figure 3. Dry-Erase Written Responses With a Student Tracking Chart Example



accuracy of student participation can help predict the academic performance of students with learning disabilities (Gersten et al., 2009). In this example, the teacher was working with 11 students during a direct instruction block, and the objective was to identify pennies, nickels, dimes, and quarters by holding up the corresponding response card when prompted. The teacher used a chart that matched her seating arrangement, and each desk on the chart represented one student. Throughout the math lesson, the teacher noted whether students held up correct or incorrect response cards when prompted to identify types of coins. Using this method, the teacher was able to monitor her students’ progress toward mastery of the content. This type of formative assessment tracking chart can be used to track progress toward IEP goals or to provide specific information about student participation and accuracy for a given learning objective. Recording progress toward individualized goals and objectives becomes as simple as noting how many opportunities the student had, to identify coins, for example, and how often he or she was accurate.

Using the example provided in Figure 2, the special educator may decide to pull Simon (S.H.) and Anna (A.N.) into a small group to reteach using guided practice, scaffolded instruction, or a gradual-release model because these students answered only four out of the 10 questions correctly.

Whole-Group Responding Through Writing

Whole-group response strategies can include written responses on exit tickets, open-ended poll questions, surveys, and dry-erase boards. Written responses may be more appropriate than hand signals or response cards in situations where teachers need to accurately capture and make judgments about student learning related to instructional objectives (Thiede et al., 2015). Teacher prompts can be content specific or can target learning and thinking skills, such as taking a stance on a topic or explaining one’s own reasoning to promote reflection (Miranda & Hermann, 2015). Further, whole-group probes that require written responses can be open-ended or require students to show their

work as opposed to closed-ended-only probes during response cards or hand signals. Rather than asking only a portion of the students to actively engage in solving an equation during math class, all students can work on solving the math equation at the same time using whole-group written response systems. This also prevents students from skipping ahead because they are all working only on a singular probe at the same time (Archer, 2008).

Figure 3 illustrates how to use dry-erase boards during whole-group instruction. Students can write a vocabulary term, rewrite a sentence using correct punctuation, or construct an extended response to a probe. Students also can create pictorial or representational written responses when the teacher probes allow for it. Building in classwide wait time or using a visual timer to indicate when students can respond provide all students with an opportunity to participate (see Johnson & Parker, 2013). When asking for written responses beyond one sentence, consider including sentence

starters or a mnemonic device such as POW (pick my ideas, organize my notes, write and say more), because students with learning disabilities require planning time and a way to organize their thoughts before writing (Graham & Harris, 2003).

The formative assessment chart in Figure 3 includes data collected throughout an entire week to track how students performed during a 5-minute spelling check before lunch each day. Students were asked spelling words from their list, and the teacher simply wanted to track if students were error free or not during this 5-minute activity. The hope was that by Friday, all students would write spelling words without error. A chart like this can be used in many different ways to track student participation and learning. In this example, the teacher was checking for content mastery and used this information to determine which spelling words to include in area or station work throughout the week. This type of formative assessment chart allows for differentiation and a way to guide

co-planning. For example, Becky, Alyssa, and Tyrod were introduced to more complex spelling patterns during station work with the general educator because they reached and maintained mastery of the class spelling words early in the week. Katlyn, Blanca, and Dixon, on the other hand, worked with the special educator to create self-correcting materials that reinforced the spelling patterns they were struggling with during whole-group spelling checks.

Final Thoughts

Teachers need methods for engaging students with learning disabilities in a positive learning community when whole-group instruction is unavoidable. Increasing students' opportunities to respond and providing student comprehension self-checks as well as capturing this information using formative assessments are very important topics for all teachers. The strategies we have discussed in this article can be used across content areas and in a variety of settings. Teachers can use the information gathered through increasing students' opportunities to respond as a way to both monitor progress and inform instruction.

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The formative assessment templates will become a student data log over time. There is no need to create extra work by transferring the data to another form. Simply photocopy the completed templates and keep them in each student's file for future reference. Look for patterns within subject areas or over a set period of time. Note whether specific students respond to one type of whole-group response strategy over another to make decisions



about future class activities. Whether they are addressing student engagement, content understanding, or targeted IEP goals, teachers will have evidence at their fingertips to reflect on as they plan lessons. Teachers can group students for cooperative activities based on patterns among student answers as well as determine which students require small-group specialized instruction to preteach or reteach key concepts. Together, these tools can provide teachers with valuable data they need to make important instructional decisions.

Proactive whole-group response systems paired with formative assessment charts have the potential to result in more effective instruction that actively engages students in the learning process. These strategies can be implemented easily in classrooms with minimal additional resources and are applicable across grade levels and content areas with appropriate modifications. Students with learning disabilities have demonstrated deeper engagement and understanding as well as positive student-teacher and peer-to-peer interactions using the strategies we discuss (Berry, 2006; Clunies-Ross, Little, & Kienhuis, 2008; Randolph, 2007). To achieve positive results, it is important that teachers create safe learning environments where students with learning disabilities are encouraged and feel confident to take risks in revealing responses that reflect their own understanding. Using repetitive whole-group response strategies can build predictability into the lesson, which has been shown to lower anxiety and increase participation (see Heritage & Heritage, 2013). Teachers can reinforce a safe learning community by moving around the classroom, observing student work to ensure it matches their responses, and having students engage in peer discussion (Alexandrin, 2003). Proactive whole-group response strategies combined with formative assessment charts promote active student engagement and streamline progress monitoring for special education teachers.

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