Opportunities to Respond Guided Notes

Shortly after science class started, the teacher announced, “We have a small block of ice and the same sized block of butter. Tell your neighbor which one would melt first.” A few seconds later the teacher said, “Please write down in one sentence an explanation for your answer.” A few minutes later, the teacher told students to share with their neighbor what they had written. Shortly thereafter, the teacher called on one student to tell the class her an­swer. The teacher then asked the class to raise their hand if they agreed with the answer. Then the teacher asked students to give a thumb down if any­one disagreed, and so on. (Colvin, 2009, p. 48)

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ost teachers schedule or allocate sufficient time for learning, but often fail to actually ensure that their students are actively responding dur­ing that instructional time. Perhaps one of the most pivotal of assurances for learning is engaged time–that part of instruction where students are ac­tively involved in learning. The above classroom scene demonstrates the practice of providing numerous op­portunities to respond and engage students.

Use of opportunities to respond (OTR) includes strategies for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, asking \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and correcting students’ answers to increase the likelihood of an \_\_\_\_\_\_\_\_ and desired re­sponse. It is an instructional question, statement, or gesture made by the teacher seeking an academic response from students. It addresses the num­ber of times the teacher provides aca­demic requests that require students to actively respond (Miller, 2009; Sprick et al., 2006). Simonsen, Myers, & DeLuca (2010) simply define OTR as a teacher behavior that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**The Value of Providing Numerous Opportunities to Respond**

The more time students spend in­volved in learning activities, the more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Additionally, increased rates of responding and the subse­quent improved learning tend to in­crease the amount of material that can be \_\_\_\_\_\_\_\_\_\_\_. When teachers increase their rates of opportunities to re­spond, student on-task behavior and correct responses increase while dis­ruptive behavior decreases (Barbetta, Heron, & Howard, 1993; Carnine, 1976; Heward, 1994; Sutherland, Al­der, & Gunter, 2003; Sutherland & Wehby, 2001; West & Sloane, 1986). Teacher use of opportunities to re­spond has also shown to improve reading performance (e.g., increased percentage of responses and fluency) (Skinner, Belfior, Mace, Williams-Wilson, & Johns, 1997) and math performance (e.g., rate of calculation, problems completed, correct responses) (Carnine, 1976; Skinner, Smith, & McLean, 1994). In addition, obtaining frequent responses from students provides continual feedback for the teacher on student learning and the effectiveness of their instructional activities.

**Guidelines for Response Rates**

What is a high rate of opportunities to respond? A common suggestion is that teacher talk should be no more than \_\_\_\_\_\_\_% of the instructional time, with the remaining time and activities fully engaging students. The Council for Ex­ceptional Children (1987) has pro­vided guidelines for optimal response rates for students. When learning new material, teachers should strive to ob­tain a minimum of \_\_ to \_\_ responses per minute with \_\_% accuracy. If ac­tivities involve the review of previ­ously learned material, teachers should strive for \_\_ to \_\_ responses per minute with \_\_% accuracy.

**Opportunity To Respond Strategies**

When students are actively involved in an activity (e.g., writing, solving a problem, reading out loud, etc.), in contrast to listening (passively in­volved) greater learning gains are made. Varied and creative strategies to provide students with frequent op­portunities to respond exist (MacSuga & Simonsen, 2011). Typically they are either \_\_\_\_\_\_ strategies, where students are responding orally to teacher prompts or questions, or \_\_\_\_\_\_\_\_\_\_\_\_\_ strategies, where students use a sig­nal, card, writing or movement to re­spond (Scott, Anderson, & Alter, 2012). Some examples of both effec­tive verbal and non-verbal response strategies follow.

**Verbal Responses.** These are familiar teacher strategies that focus on stu­dents orally answering a question, sharing their ideas, reviewing or sum­marizing prior learning, or simply re­peating a new concept after the teach-er. Two common strategies are indi­vidual questioning and choral re­sponding.

Individual Questioning. Perhaps the simplest strategy is to use a response pattern to make sure that all students are called on. Many teachers default to calling on eager volunteers, which re­sults in interacting with a few inclined students while others may disengage. Calling on students \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ heightens student attention:

* Teachers can use the seating chart and call on students randomly, tal­lying on that chart to monitor the rate of questions presented to each student.
* Student names can be on strips of paper or popsicle sticks in a can or jar. As questions are posed, a stu­dent name is drawn.
* Another verbal questioning strat­egy to hold attention, increase op­portunities to be involved with and reinforce the learning is, using one of the above random call strategies, to ask the student to repeat or sum­marize what the student who just answered said.

It is important to remember to ask the question first, and then pause before call­ing on the student to respond. This requires thinking and being prepared to respond by all.

Choral Responding. Choral responding is verbal response strategy used fre­quently in early schools that has re­surged in use since the 1970’s. Choral responding occurs when all students in a class respond \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to a teacher question. Used to review pre­viously taught concepts, to teach new skills, as a morning drill, or as a lesson summary, choral responding is suita­ble for many teacher-led activities. An example of choral responding offered by Heward and Wood (2004) follows:

*Ms. Finch’s first graders have just fin­ished reading a story about a young boy named Howard. Ms. Finch puts her storybook on her lap, holds up her hand and says, “Class, get ready to tell me the main character in today’s story.” She says, “Think big,” drops her hand as a signal, and the students chime in “How­ard!” “Howard is right,” exclaims Ms. Finch. “Way to go!” She asks ten more quick questions–some about the setting and main idea. “Last one. Here we go. The problem Howard faced was finding his lost dog. Is that true or false? Think about it.” She signals and the students eagerly respond, “False!” The students laugh and so does Ms. Finch. “I couldn’t trick you, could I?” she asks. “Tell me why that’s false.” She calls on James who is frantically waving his hand to answer.*

To use choral responding you: 1) de­velop questions with only one right answer that can be answered with short, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ answers, 2) provide a thinking pause or \_\_\_\_\_\_\_\_\_\_\_\_ of at least three seconds between ask­ing the question and prompting stu­dents to respond, 3) use a clear signal or predictable phrase to \_\_\_\_\_ students when to respond in unison, 4) use a brisk, lively pace, and 5) provide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_on the group re­sponse. Questions for choral respond­ing should be prepared in advance and can be visually presented via Power­point® slides. Some sample choral re­sponse questions on slides can be found at:

http://www.slideshare.net/beth­marin/choral-responding-lesson-use-this-one4

Choral responding is best used with individual questions interspersed. This mixed responding strategy has an element of surprise and cues students to heighten their attention. It also al­lows you to assess individual learning. Additionally, successful use of choral responding hinges on thorough pre-correction regarding listening, the re­sponse signal, appropriate voice tone, etc.

While not as easy to implement as in­dividual questioning strategies, en­couraging results from the use of cho­ral responding have been demon­strated at all levels–elementary, mid­dle and secondary grades for students with and without disabilities (Cavanaugh et al., 1996; Godfrey, Gri­sham-Brown, Hemmeter, & Schuster, 2003; Hewerd et al., 1996).

Wait Time or Think Time. Both of the above verbal response strategies gain some of their effectiveness from “wait time.” Wait time is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. When wait time is used, Rowe (1987) tells us that students are more engaged in thinking, typically participate more often, demonstrate an increase in the quality of their re­sponses, and have more positive stu­dent-to-student interactions. Using wait time usually results in fewer re-directs of students and fewer disci­pline problems (Rowe, 1987).

Wait time is simply pausing after ask­ing a question and counting for\_\_\_

\_\_\_\_\_\_\_\_\_\_. This can be done by inaudi­ble counting, looking at a stopwatch, or following the second hand on the clock. The challenge of getting teach­ers to slow down and pause after ask­ing questions can be addressed through peer coaching where ques­tions are noted and pause time meas­ured and reported. It has also been helpful to video tape teachers and al­low them to reflect on their use of think time or wait time as well as the types of questions they are asking and who is being called on.

**Non-Verbal Responses**. A non-verbal response system has all of the benefits of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in that every stu­dent is actively answering or respond­ing to each question or problem posed by the teacher. Most common non-ver­bal low-tech response systems involve \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and written responses by students or prepared \_\_\_\_\_\_\_\_\_\_\_\_\_\_ cards. And more recently, schools are using technology to increase student response rates with “\_\_\_\_\_\_\_\_\_\_\_\_\_\_” or student response systems.

White boards. Students have personal white boards to write answers to teacher’s question with an erasable pen (Heward, 2006). Students can write letters, words, numbers, draw symbols or solve problems and then, when cued, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to display their answers. Students use an eraser, \_\_\_\_\_\_\_\_\_\_, or cloth to erase their answer and await the next question.

Response Cards. Another non-verbal format is response cards. These are pre-printed cards, often on cardstock and laminated, that have choice words on each side such as *\_\_\_\_\_/\_\_\_\_\_,* *\_\_\_\_\_/\_\_\_\_\_\_\_, \_\_\_\_/\_\_\_\_\_.* They might also include a set of a few options such as *noun, pronoun, verb,* and *adverb*. If us­ing multiple responses, be sure that they are few enough to avoid confu­sion and can be identified quickly for response.

Just as with choral responding, stu­dents must be taught the expected be­haviors when using white boards or response cards. Teachers should:

* Prepare questions to carefully match your response options; if stu­dents are writing on white boards, minimal writing is best.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for use of cards or white board including when to select their card or write their re­sponse, when to share, and when to clean boards or reposition cards for next question. (e.g., “Write your answer now.” Or “Look and se­lect your answer.” Then, “Show your answer now.” “Cards down, eyes up here, ready for the next question.”)
* Assess student responses and pro­vide \_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ feedback. (“That’s right! The answer is 86!”)
* Provide the \_\_\_\_\_\_\_\_\_\_\_\_ answer and a brief explanation if a significant number of students did not respond accurately, and then re-present the question.

If using white boards, careful plan­ning, organization, and teaching for use of utensils is essential (baggies with boards, dry-erase marker and cloth, eraser, or sponge, etc.) The time and initial costs to prepare white boards or response cards is far out­weighed by the benefits of high re­sponse rates. Card sets can be used again and again across the school year as different topics are being ad­dressed.

Student Response Systems. Technol­ogy is a big part of the net generations lives, and many schools are finding the value of using this relatively new ap­proach to engage and motivate learn­ers. Commonly called “\_\_\_\_\_\_\_\_\_\_\_\_,” the process is a three-step process: 1) dur­ing class discussion, the teacher displays or \_\_\_\_\_ a questions, 2) all stu­dents \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ using their wireless hand-held keypad or other web-based device, and 3) responses are received and displayed on the teacher’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as well as on an overhead projector screen. Each device is also numbered so that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ responses can be downloaded for recordkeeping or further analysis after the session has ended. Student engagement and motivation or student satisfaction seems to be en­hanced as the devices allow for all to respond anonymously, using a familiar game approach (Reiser, R. A., & Dempsey, J., 2007). An additional benefit of clickers is the ability for teachers to see immediately how students answer, and adjust their teaching to either forge ahead with new content or continue teaching and review. Teachers may find the ability to automate data collection the most obvious benefit over other non-verbal re­sponse approaches.

In addition to these non-verbal re­sponse strategies, other signaling or movement activities might be used (e.g., thumbs up, thumbs down; stand up, sit down; move to four corners; or other creative signals).

Guided Notes. Another non-verbal strategy for increasing student engagement is guided notes. Guided notes are teacher prepared handouts that lead students through a presenta­tion or lecture with visual cues or pre­pared blank spaces to fill in key facts or concepts. Guided notes not only help to increase student attention and engagement, but also provide them with a standard set of notes and helps with outlining skills. An unintentional benefit of guided notes is that teachers must carefully plan and monitor les­sons in order to follow the guided notes; they are more likely to stay on target with the lesson.

When developing guided notes: 1) ex­amine your current lecture outlines, 2) identify key \_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_ or rela­tionships that could be left blank and filled in by students, 3) consider in­serting concept maps or a chart, dia­gram or graph to help with under­standing, and 4) provide the students with formatting clues such as blank lines, numbers, bullets, etc. While wanting students to remain engaged, be careful not to require too much writing. The content of the guided notes can be adjusted to match the specific needs of students (e.g., motor deficits–more information and less writing; developmental delays–simpli­fied terms, etc.)

**Other Practices that Increase OTR**

Other commercial programs have evi­dence of their impact on learning through numerous opportunities to respond. Computer assisted instruc­tion provides frequent responses and immediate feedback on results to en­hance motivation and learning. Class-wide Peer Tutoring provides a sys­tematic approach to reciprocal peer tutoring that promotes high levels of on-task behavior by simultaneously engaging all students. Direct Instruc­tion is a teaching model that is the foundation of several commercially available reading and math programs that emphasizes carefully controlled instruction and an empha­sis on high response rates and pace in a scripted interactive format. More information is available at http://www.nifdi.org or http://direcinstrucion.org.

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