References and Resources

Applied Behavior Analysis: Using Science to Improve Educational Outcomes for All Students
William L. Heward, Ed.D., BCBA-D
The Ohio State University

Topics

- Applied Behavior Analysis: What and Why for Education
- Choral Responding
- Response Cards
- Self-Monitoring
- Numbered Heads Together
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**Applied Behavior Analysis: What and Why for Education**

Applied behavior analysis (ABA) is the science in which tactics derived from the principles of behavior are applied systematically to improve socially significant behavior and experimentation is used to identify the variables responsible for behavior change (Cooper, Heron, & Heward, 2007, p. 21). Research in ABA has produced knowledge that can be used to improve the practice of any profession where understanding how behavior works and how to change it is important. Appropriate applications of behavior analysis, be they in education, healthcare, industrial and highway safety, the environment, gerontology, employee productivity, improving the performance of competitive athletes, or education and treatment of children with autism—all focus on increasing people’s quality of life.


Choral Responding

Choral responding—all students in the class responding orally in unison to a question or item presented by the teacher—has been around since the days of the one-room schoolhouse. CR is the simplest and fastest way to increase student participation in group lessons. CR has been the response mode in numerous studies demonstrating a strong relationship between frequent ASR during instruction and improved learning outcomes (e.g., Maheady, Michielli-Pend, Mallette, & Harper, 2002; Sterling, Barbetta, Heward, & Heron, 1997) and has been used successfully with students with disabilities (e.g., Cihak, Alberto, Taber-Doughty, & Gama, 2006; Flores & Ganz, 2009; Sterling et al., 1997).


Choral Responding (continued)


Choral Responding (continued)


Response Cards

Response cards are cards, signs, or other items simultaneously held up by all students in the class to display their responses to questions or problems presented by the teacher. With preprinted RCs, each student selects from a personal set of cards the one with the answer he wishes to display. When using write-on RCs, students use dry-erase markers to write their answers on blank cards that they erase between learning trials. Numerous studies in general and special education classrooms at the elementary, middle, and secondary levels have found increased rates of student responding, higher accuracy of responding, and higher scores on quizzes and tests when RCs were used compared to lessons in which the most common method for obtaining student participation during group instruction—having each question answered by individual student.


### Self-Monitoring


Self-Monitoring (continued)

KidTools. Available online at: http://kidtools.missouri.edu/


Numbered Heads Together


Classwide Peer Tutoring


