BEHAVIORAL INTERVENTIONS: RESPONSE CARDS STUDY GUIDE FOR POWERPOINT PRESENTATION

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DEFINING THE INTERVENTION

This study guide is a supplement to the PowerPoint presentation titled, Behavioral Interventions: Response Cards. In this study guide you will find an in depth breakdown of the material covered in the PowerPoint presentation. The content of this study guide includes: defining the intervention, annotated bibliography, glossary, case study, discussion questions, frequently asked questions, and references.

A response card is a way to increase the student's opportunity to respond in the classroom. It is a positive behavioral intervention and support (PBIS) for the students.

PBIS is a school-wide approach to addressing disciplinary behavioral problems in the classroom by encouraging a learning environment that is safe for teachers and students. PBIS initiates interventions for students who may not otherwise be addressed by school-wide systems of intervention (Kerr & Nelson, 2010).

This study guide will inform you of the who, what, when, where, and why of using response cards in your classroom.

ANNOTATED BIBLIOGRAPHY

A significant amount of response card literature targets elementary and middle school students. A study by Cavanaugh, Heward, and Donelson (1996) looked at 23 ninth grade high school students. The students range from general education to learning support. The study looked at the effectiveness of response cards on end of the chapter review materials. As revealed in other studies the use of response cards in classroom instruction and test review proved to yield higher test scores. The results showed 13 of the 15 general education students and all 8 of the learning support students scored higher on the test when using the response cards for review.

A study done by Christle and Schuster (2003) was particularly interesting when one considers the rise of inclusion classrooms in education. Inclusion leaves teachers providing multiple levels of instruction in a single classroom. This study compared hand raising response to response cards. At the end of the study results show the students scored higher on the weekly math quiz after the review using response cards.

According to Gardner, Heward, and Grossi (1994), students learn by doing. This article looks at the use of response cards in a 5th grade science class. The study expanded upon the findings of other students that looked at response cards. While looking at 13 boys and 11 girls from 10 to 12 years of age, it was reported that the response cards improved participation and test scores. Students reported that they preferred the use of response cards because cards were more fun.

NOTE: A response card is defined as a laminated white board that is written on by the student with an erasable marker.

As a part of the chapter titled, "Classroom-wide positive behavior support", the topic of opportunities to respond arose. An example of an opportunity to respond in the classroom is through response cards. To ensure students are kept on task, teachers should consider yes or no questions, the appropriate size cards, and clear directions (Kerr, & Nelson, 2010).

A study done by Malanga and Sweeney (2008) looked at the various studies conducted to find methods of increasing student responding in the classroom. This study aimed to find methods that were cost effective, easily implemented, enjoyable, adaptable to a variety of content areas, and produce higher learning outcomes. The study concluded with the use of response cards being a productive way to raise student performance.

NOTE: Pre printed response cards are cards given to the student with the answers on the card. When cued by the teacher the student raises the card with the appropriate answers.

Research done Munro & Stephenson (2009) reveals the use of response cards raises the frequency of students to respond in a whole class instruction. This increase in responsiveness leads to a decrease in classroom behavior problems. This study looked at 5 students who have a history of school related anxiety and absences. The studies results

build on previous response card studies in that teachers provide more feedback as opposed to the feedback given with traditional hand rising. The potential reason is that in the use of response cards the teacher can see more information and errors given by students. This can be addressed by whole class or individualized feedback. The change in instruction therefore increasing the student's motivation to learn.

NOTE: The use of effective response card used has been displayed in Science, Social Studies, English/Vocabulary, and Psychology classes from Kindergarten to Undergraduate College Students.

Stowell and Nelson (2007) conducted a study in an undergraduate psychology class. They concluded using response cards through evidence based research has proven to increase: participation, grade performance, and classroom self esteem by creating a more fun, interactive learning environment where all students are actively engaged in the learning process. With the rise of technology, this study looks at clickers. The immediate feedback and graphic display polling result for the teacher to give the most effective feedback. A clicker is the most efficient version of a response card. The data about students reviewed by clicker response can be saved in a data base used for further research.

NOTE: A clicker is defined as an electric audience response system. Student responses are sent electronically from the hand held key pad (clicker) to a receiver attached to a computer.

This study by Wood, Mabry, Kretlow, Ya-yu and Galloway (2009) looked at practical methods of instruction for teachers in economically disadvantage school districts. Rural schools with limited resources need to benefit from effective teachers. The No Child Left behind (NCLB) act increased teacher accountability and standards. This study found pre printed response cards to be economically inexpensive, efficient, and effective in classroom instruction. The teachers reported to like the additional social interaction the cards brought to the classroom.

GLOSSARY

Clickers: Electronic audience response system. Students' responses are sent electronically from the hand held key pad to a receiver attached to a computer which then puts answers in graphs and databases.

Evidence-based practices: Practices that address academic and social behaviors that are supported by research evidence that has been validated by professionals.

Opportunities to respond (OTR): Giving students multiple opportunities to respond with correct academic or social information or behavior.

Preprinted response cards: Cards given to students with answers printed on the individual cards. When cued by the teacher the student raises the card with his/her response to the teacher's question.

Response cards: This evidence-based practice involves giving students dry erase boards, pre printed cards and/or clickers, on which they answer classroom questions.

CASE STUDY

Part I. Miss V is talking to Johnny and Sally after class.

Class: Bye Miss V, see you tomorrow.

Miss V: Bye class, have a wonderful evening and don't forget to read section 3.4 in your social studies books.

Johnny: Miss V, I'm sorry, but this stuff is too boring.

Sally: You are right Johnny. I could care less about these lessons.

Miss V: I understand your concerns, but social studies is important. We must understand what happened in our past, so we can better understand the present. Both of you scored below 50% on the last three social studies quizzes. Maybe if you spent less time writing notes and texting friends, your grades would improve!

Sally: Miss V, this is so unfair! Johnny and I already received progress reports for our poor social studies grades.

Johnny: Yeah, and last quarter I got a D. My life will suck if I have to go to summer school.

Miss V: I don't know what to tell you. The other students seem to be doing just fine.

Sally: Yeah. Right, Miss V!

Miss V: What do you mean, Sally?

Sally: Never mind!
Miss V: Just tell me.

Johnny: I'll tell you. You are the most boring teacher in school. Even Ryan gets B's in

your class.

Sally: Do you know Ryan is the smartest kid in our eight grade class!

RING RING RING

Sally & Johnny: We need to get to math. Bye, Miss V.

Part II. Miss V talks to Miss P.

Miss V: Hi, Miss P, Do you have time to talk?

Miss P: Sure, Miss V. What seems to be bothering you?

Miss V: Well...I am having trouble with Sally and Johnny paying attention in class and studying for their quizzes. I spoke with them, and they both said I "suck" and they do not see the need for social studies.

Miss P: Wow, that's a tough situation. Sally and Johnny participate a lot in Math. They are both 'A" students.

Miss V: What am I doing wrong?

Miss P: I don't think you are doing anything wrong. Maybe you just need to increase Sally and Johnny's opportunities to respond in your class.

Miss V: Okay, but how do I do that?

Miss P: I use response cards, they work great. The district actually bought me a set of cards.

Miss V: I remember hearing about those at that conference over the summer.

Miss P: You can borrow my boards if you want to test it out in your class.

Miss V: Great. Thank you so much for your help.

One Week Later

Miss V: Miss P, I wanted to thank you for your help. The response cards worked great. Johnny and Sally both got Bs on the last quiz, and Ryan got an A. I overheard the students talking before class and they said "We love learning with the cards" "it is fun and time flies" "Before I know it is time for lunch".

Miss P: I'm glad to hear it worked.

DISCUSSION QUESTIONS

1.	Do you think Miss V handled Johnny and Sally's situation correctly?
2.	How could Miss V have encouraged the students to succeed in social studies?
3.	As a teacher, have you ever encountered a situation like Miss V's? If yes, how did you handle it?
4.	List 3 lessons in which you would implement response cards?
5.	List 3 lessons in which you would not implement response cards?

FREQUENTLY ASKED QUESTIONS

1. What if my school does not have a budget to support the use of response cards? Response cards do not have to involve clicker technology. Students can use popsicle sticks with construction paper attached, paddles. You can also make your own dry erase boards by covering a recycled manila folder with a plastic sheet protector. A study done by Wood, Mabry, Kretlow, Ya-yu and Galloway (2009), found pre printed response cards to be economically inexpensive, efficient, and effective in classroom instruction. The teachers liked the additional social interaction the cards brought to the classroom.

2. How can I add the intervention of response cards to my lesson plans?

Response cards are not suitable for all learning activities. If you are presenting new material the students may need time to read and learn the new content. You would not use response cards for this type of environment. Response cards can be used in setting such as: If you are reviewing the previous day's lesson; reviewing for a test or quiz; and checking for class understanding and participation.

REFERENCES

- Cavanaugh, R., Heward, W., & Donelson, F. (1996). Effects of response cards during lesson closure on the academic performance of secondary students in an earth science course. *Journal of applied behavior analysis*, 29, 403-406.
- Christle, C., & Schuster, J. (2003). The effects of using response cards on student participation, academic achievement, and on-task behavior during whole-class, math Instruction. *Journal of behavioral education*, 12(3), 147-165.
- Gardner, R., Heward, W., & Grossi, T. (1994). Effects of response cards on students participation and academic achievements: A systematic replication with inner-city students during whole-class science instruction. *Journal of applied behavior analysis*, 27, 63-71.
- Kerr, M.M. & Nelson, C.M. (2010) Strategies for addressing behavior problems in the Classroom, 6th Edition. Columbus, Ohio: Charles E. Merrill Publishing Company. PP 213-214
- Malanga, P., & Sweeney, W. (2008). Increasing active student responding in a university applied behavior analysis course: The effect of daily assessment and response cards on end of week quiz scores. *Journal of behavioral education*, 17(2), 187-199.
- Munro, D. & Stephenson, J. (2009). The effects of response cards on student and teacher behavior during vocabulary instruction. *Journal of applied behavioral analysis*, 42, 795-800.
- Stowell, J., & Nelson, J. (2007). Benefits of electronic audience response systems on student participation, learning, and emotion. *Teaching of psychology*, *34*(4), 253-258.
- Wood, C., Mabry, L., Kretlow, A., Ya-yu, L., & Galloway, T. (2009). Effects of preprinted response cards on students' participation and off-task behavior in a rural kindergarten classroom. *Rural special education* quarterly, 28(2), 39-47.