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ABSTRACT
                A panel of experts from a variety of disciplines was convened
to advise policymakers about what is known about instructional effectiveness
in adult and family literacy situations. The panel concluded that, although
little research examining instructional effectiveness in family and adult
literacy programs is available, a great deal of "best practices" research has
been conducted in K-12 contexts. The panel identified the following
categories of strategies that make significant differences in student
achievement: (1) reinforcing effort/providing recognition; (2)
homework/practice; (3) identifying similarities and differences; (4)
summarizing and note taking; (5) nonlinguistic representations of responses
that do not involve words; (6) cooperative learning; (7) setting objectives
and providing feedback; (8) generating and testing hypotheses; and (9)
questions, cues, and advanced organizers. A matrix in which specific learning
activities were cross-referenced to strategies 3-9 was also presented. It was
recommended that adult and family literacy educators in Ohio and elsewhere
use the strategies and matrix to improve their instructional practices. In
addition, adult and family literacy educators were advised to consult the
World Wide Web site of the Ohio Literacy Resource Center for additional
information on using proven instructional strategies in their literacy
programs and to share the results of research on instructional strategies
with their adult students. (MN)

Ohio Literacy Resource Center

Enhancing Adult Literacy in Ohio

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Research to Practice

Strategies That Work:
What Does the Evidence Tell Us?

Nancy Padak

In the fall of 2001, a "panel of experts from a variety of disciplines" was convened to advise a variety of federal offices and agencies about, among other issues, what we know about instructional effectiveness in adult and family literacy situations. The panel concluded that "there is little research that directly addresses instructional or program effectiveness in this area.... Valuable information can be drawn from the research findings on reading processes and instructional approaches for children in kindergarten through grade 12" (NICHD, no date).

For those of us concerned about evidence-based instructional practices in adult and family literacy, this lack of research comes as no surprise. Fortunately, a great deal of "best practices" research has recently been conducted in K-12 contexts. One particularly useful study, *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement* (Marzano, Pickering, & Pollock, 2001), is the focus of this article. I will summarize the study and its findings and identify the ways in which this research can be useful in adult and family literacy contexts.

The Study

Robert Marzano and his colleagues, researchers at Midcontinent Research for Education and Learning, began by gathering research studies that were based on instructional strategies. They grouped strategies by type and then used a research technique called meta-analysis to determine the overall impact of the strategies on student achievement. The result of a meta-analysis is an effect size: "An effect size expresses the increase or decrease in achievement of the experimental group (the group of students who are exposed to a specific instructional technique) in standard deviation units" (p. 4). For the statistically challenged, they also translated effect sizes into percentile scores. So, for example, an effect size of 1.0 means a percentile gain of 34 points—quite an advantage for students using this strategy!

The Results

Nine categories of strategies were found to make a significant difference in student achievement. Two of these—reinforcing effort/providing recognition and homework/practice—are more good instructional advice than actual instructional strategies. The other seven categories, however, describe the kinds of instructional situations that give rise to achievement gains. The labels for these categories are generic. For example, Marzano and colleagues found a variety of strategies that focus on similarities and differences to lead to student achievement. The seven categories of strategies are

- Identifying similarities and differences (effect size: 1.61; percentile gain: 45)
- Summarizing and note-taking (effect size: 1.00; percentile gain: 34)
- Nonlinguistic representations or responses that don't involve words (effect size: .75; percentile gain: 27)
- Cooperative learning (effect size: .73; percentile gain: 27)
- Setting objectives and providing feedback (effect size: .61; percentile gain: 23)
- Generating and testing hypotheses (effect size: .61; percentile gain: 23)
- Questions, cues, and advanced organizers (effect size: .59; percentile gain: 22)

	Similarities and differences	Summarizing and note-taking	Nonlinguistic representations	Cooperative learning	Setting objectives & providing feedback	Generating & testing hypotheses	Questions, cues & advanced organizers
Affinity Diagram	X	X		X			
Agree? Disagree? Why?		X		X	X	X	X
Beich's Heuristic	X	X		X			
Brainstorming		X		X		X	X
Discussion Webs	X	X		X		X	
DR-TA/DL-TA				X	X	X	X
Herringbone		X		X			
K-W-L		X		X	X		X
Manzo's GRP		X		X		X	X
Matrices	X	X		X			
PreP					X		X
Readers Theater			X	X			
ReQuest				X			X
Save the Last Word for Me		X		X		X	X
Semantic Mapping	X	X		X			
Sketch-to-Sketch		X	X	X			
Think-Alouds	X		X		X		X
Think-Pair-Share		X		X		X	
Venn Diagrams	X	X		X		X	
Word Sorts	X	X		X	X	X	X
(Write & Share) 2		X		X		X	

Using the Results

Adult and family literacy educators can use this research evidence to evaluate and improve their instructional practices. One suggestion is to keep a list of strategies used over a period of time, say a couple of weeks. Then examine the list to determine the characteristics of instruction. Ask questions such as, how often are students involved in thinking about similarities and differences? How do we emphasize summarizing? When do students take notes?

The research evidence can also be useful when learning about new strategies. Think about what students will do if they participate in a new strategy. One that involves both cooperative learning and generating and testing hypotheses, for example, might be worth incorporating into your instructional routine.

For nearly a decade, we at the Ohio Literacy Resource Center have been collecting instructional strategies for teachers to use. First distributed in paper and later as part of our ongoing Tradebooks project, the strategies are now available on the WWW as part of our *Eureka!* site: http://literacy.kent.edu/eureka/strategies/index.html. Here you will find clear directions for using dozens of instructional strategies. These strategies work. The matrix that appears above, which links the strategies to evidence provided by Marzano et al., shows just how powerful they are. So incorporating some of these strategies into your instruction is yet another way to use the results of this study.

Finally, you might want to share this research evidence with your students. You can explain that these strategies lead to higher achievement gains. ABLE teachers often tell us that some students are reluctant to participate if they cannot see the direct link between instruction and their overall goals, usually GED success. This goal-driven stance is both understandable and praiseworthy. Students need to see the relationship between ABLE and family literacy instruction and the achievement of their goals. Teachers do too.

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