Making A Difference in Arkansas: The Multicultural Reading and Thinking Project

Developing students' critical thinking abilities and cultural awareness through direct instruction is the goal of a three-year collaboration of teachers and state department reading specialists.

What are the “inside” and “outside” descriptions of this character?

Compare the customs of these two cultures.

What do the behaviors of the character tell you about the beliefs of the culture?

Were the lives of the immigrants better or worse?

In seven school districts throughout Arkansas, 650 students in 4th, 5th, and 6th grade consider questions like these as part of their participation in Multicultural Reading and Thinking (McRAT), a three-year project to develop their critical thinking abilities and to increase their cultural awareness.1 A collaborative effort of teachers and Department of Education reading specialists, the project has received funding from the Arkansas Department of Education, the Winthrop Rockefeller Foundation, and Chapter II. From designing lessons to planning inservice meetings to share their experience and expertise with colleagues to developing tasks to assess students' achievement, teachers' professional development is emphasized throughout the project.

Lesson Design

McRAT’s instructional goals focus on four categories of reasoning skills that students can use in academic subjects such as reading, literature, and multicultural awareness, and that also transfer to practical situations. These four categories—analysis, comparison, inference/interpretation, and evaluation—are fundamental to frameworks of inquiry, problem solving, and critical thinking proposed by philosophers, psychologists, and curriculum designers (Quellmalz 1985, 1987). Students learn explicit strategies for each category and develop an awareness of how the strategies can transfer across problems to help them plan, monitor, and evaluate their critical thinking processes.

To refocus instruction on critical thinking as it applies to concepts of global interdependence, teachers have examined textbooks, basal readers, trade books, and other classroom resources in order to design activities for sustained reasoning about significant reading, literature, and multicultural topics. These topics derive from state objectives for reading, literature, and global studies that the teachers and reading specialists have identified as corresponding with the four thinking skill categories.

Through an iterative process of designing lesson objectives for specific stories or multicultural activities and designing general questions, the project collaborators have been creating a set of generic lesson objectives. For example, for units focusing on strategies for analysis, generic literature/reading objectives might be, "Analyze..."
When students have finished their analysis, they may use the following questions to evaluate their analyses:

1. Did I name and define what I analyzed? Did I name important parts or groups of information about it?
2. Did I describe enough information and examples for each group or part?
3. Did I explain how the parts relate to the whole and why they are important? So what?

Fig. 2. Evaluative Criteria for Student Responses (Student version)

the elements of the plot” or “Analyze the character’s actions, thoughts, or feelings.” These generic questions can be applied to numerous basal readers or trade books. Similarly, generic questions for applying analysis strategies to multicultural concepts might be, “What are the social, environmental, political, economic, or artistic elements of this culture?”

In addition to designing lesson objectives that require sustained reasoning about literary or cultural concepts, teachers have been working together to design, use, and refine instructional strategies and model lessons. Ultimately, these “prototype” lessons will make up a project resource manual and also serve as models for developing other lessons. “Templates”—a second level of lessons based on the growing body of generic questions or objectives—provide instructional shells that may be applied to similar concepts or stories. For example, a lesson on the analysis of a character in one story can be recycled to analyze characters in other stories or famous people in a culture.

To support project teachers in their pioneering efforts, released time is provided for half-day monthly meetings at each school. During these meetings and the project inservice sessions, teachers share their lessons and experiences with colleagues, use evaluative criteria to critique student work, and design future units.

**Instructional Approach**

Direct instruction in thinking strategies is the approach used in each

**Fig. 3. Elements of Inquiry Process for Direct Instruction in Thinking Strategies**

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In an instructional unit on analysis, for example, teachers present students with a set of explicit general strategies on how to analyze anything. These strategies, which have evolved from related higher-order thinking projects, are displayed on posters in the classroom (fig 1).

The project also presents thinking strategies for the other three categories of reasoning skills. The intent is to provide students with standard vocabulary and sets of strategies applicable across subject areas. Each lesson opens and closes with reference to the strategies and discussion of how they are used for the lesson objective at hand, and how they apply to other concepts in the same subject area, in other subjects, and in school or practical situations.

During each lesson, students receive direct instruction on use of the thinking strategies through teacher modeling, explanation, guidance, and feedback. The approach guides students through an inquiry process involving nine research-based components (see fig. 3).

A particularly powerful instructional tool that project teachers use is visual mapping. They have created maps to illustrate an analysis of story elements and schemes to help students “see” how to analyze a character simply (inside and outside characteristics) or with more complexity (thoughts, feelings, actions). Other mapping schemes have been developed for comparison, inference, and evaluation.

To date, teachers have developed over 100 lessons that continue to be tried and revised. These materials, along with descriptions of instructional strategies particularly effective for each thinking skill area and videotapes of model lessons, will be incorporated into the resource manual and staff development materials.

Project Assessment
Assessment of McRAT involves teachers and students in applying criteria to determine the success of critical thinking assignments. Teachers also develop tasks to assess students’ progress and achievement. Evaluation of students’ skill development is built into each project lesson. Whether students write essays or present their syntheses of the activities orally, teachers and students use criteria derived from the thinking strategies to determine how well the presentations applied the thinking strategies. These criteria have also evolved from related higher-order thinking projects. Students can use a simplified version of the criteria as a checklist to evaluate their work (fig. 2). The teachers’ versions have numerical ratings. Teachers and reading specialists rate and discuss representative student essays at project inservice meetings. Samples of these essay sets are being prepared for the project resource manual.

Early Results
Now into the third year of the project, McRAT staff and teachers are collecting systematic data on implementation and achievement. Results of standardized testing from the second year indicate substantial increases in national percentile rankings of student achievement scores in reading comprehension, social studies, and science. McRAT teaching strategies appear to be effective for students regardless of achievement levels or socioeconomic factors. Qualitative and quantitative data indicate that students’ abilities to write expository and persuasive essays have improved and that their motivation for learning has increased. McRAT parents report that their children are reading more at home and applying their strategies in home decision making. Parents are requesting project continuation, and voluntary expansion is occurring within four McRAT schools.

During 1987–88, the project has been conducting a systematic formative evaluation in project and nonproject schools. Instruction is being documented through classroom observations and videotaping. Teachers have been keeping logs of the numbers and the ranges of lessons they present on the four thinking skills beyond the formal model lesson. Ratings of baseline and post-instructional essays for each of the four thinking skills areas augment standardized test scores. The
project is also collecting portfolios of student work, which teachers will have evaluated using established criteria. Students' metacognitive development is being assessed through specially developed metacognitive tasks and through interviews with students to determine their ability to explain the strategies they use for tasks in each skill area and to describe possible transfer situations. This extensive blend of qualitative and quantitative methods should provide a rich body of information about the project.

Future Considerations
State educators believe the model has potential as a generic outcomes-based higher-order thinking program for additional areas of the curriculum. In fact, in related higher-order thinking projects in California districts, students in kindergarten through 12th grade have used the thinking strategies in science, art, math, writing, and social studies. The effectiveness of the McRAT approach holds promise for other curriculum reform efforts.

1. The seven school districts are North Little Rock, Batesville, Springdale, Monticello, Wynne, Marianna, and St. Theresa's.

References

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