

year and a half later, the instructional staff, parents, and students have only praise for Analytical Thinking for Children and are grateful for our expanded world of thought.

What evidence has been observed that Analytical Thinking for Children has been beneficial to our children? Major contributions to our students have been the realization that their thoughts are real and important and the development of the confidences and skills to communicate their thoughts, attitudes, and feelings to others. One of our students expressed his own feelings in these words, "We like listening to each other." That, in itself, is a major achievement for grade four students. Other facets of this program that have added to our students' educational lives are the challenge, motivation, and skills to probe more deeply into their studies. They learn to go beyond surface information. This program, too, tends to develop a cohesiveness among those students who share their analytical thinking sessions. Most decidedly, it has developed appreciation for one's own thoughts as well as those of others. Perhaps the most significant evidence that this program works is the fact that it has been expanded to include several more teachers and many more children during the current school year, 1980-81.

Gene Morgan

### Improving Reasoning Skills

In September of 1979, Dr. Joe Mitchell of Texas Wesleyan College came to my office with a proposal for initiating a pilot program of Analytical Thinking for Children at David K. Sellars Elementary School. Dr. Mitchell mentioned that research for a

program of this type being taught in New Jersey showed that reading and math scores were greatly enhanced. This got my attention in a hurry.

We have tried a variety of remedial programs in the last few years and although some of them showed excellent results, research has shown that they are not lasting results. Test scores show that the greatest weaknesses seem to be in the areas of reading comprehension and stated problems in math. Both of these require the use of a great many thought processes. Teachers lament that "children just don't think any more." I began to wonder if this new approach to an old problem might not be the missing link we have been searching for.

We embarked on the program by initiating it in one fourth grade class last school year. The results were very positive, so at the beginning of the 1980-81 school year the program has been implemented in nine classrooms, kindergarten through grade five.

We wanted to promote the program with our students and community, and somehow "Analytical Thinking for Children" seemed too long and was too difficult for children and parents to understand. For this reason we decided to call our program SPIRAL. The acronym, Sellars Program for Improving Reasoning and Accelerating Learning, seemed a much more exciting way to introduce this special program from which the students can spring into many exciting learning experiences while accelerating mastery of their skills in mathematics and reading.

Lessons in the program of Analytical Thinking for Children are less structured than regular classroom lessons and encourage spontaneous exchange of thoughts. "Thinking time" is built into

the program. We often bombard children with questions without allowing "thinking time" for serious consideration and sorting of ideas. This is one of the many advantages of the program.

During the 1979-80 school year, more than half of the David K. Sellars faculty members were enrolled in the Texas Wesleyan College class studying the teaching of critical and analytical thinking to children. The group of teachers had little or no background in philosophy. We found the material challenging and thought-provoking. As teachers we are all aware that helping children think is a major goal. Even though only nine of the twenty teachers trained last year have formally implemented the total program into their classes, the others have used activities learned from the training. We expect more to participate in the program next school year.

We realize we are only in the beginning stage of reaping the benefits from what the program has to offer. We view this year as laying the groundwork for continued growth in the area of teaching critical and analytical thinking to children. Certainly we are counting on the continuation and expansion of the program in the future. What better tools for learning could we give children than good reasoning power and adequate thinking skills.

Don Couch