Analytic Teaching in the First Grade

Every teacher looks for ways to improve her students' thinking skills. As a teacher of first grade children, I feel especially obligated to lay a strong foundation for reasoning skills. I've taught a variety of excellent reading programs, and at the end of each year I feel we've accomplished a great deal. However, one of the areas I've always felt needed improvement is the area of critical thinking. I've noticed bright children having difficulty applying known skills to a format not yet introduced to them. Standardized tests have shown me that sometimes children do not know what to do with the facts I've worked so hard to teach them. I've wished for a mini-program that would be well coordinated and offer proper sequencing and that could be used with beginning learners.

When I learned of the Analytic Teaching program, I jumped at the chance to implement it into my own teaching program. After taking a summer workshop course to prepare teachers to use Analytic Teaching in the classroom, I returned to school anxious to try what I had learned.

The program revolved around the story, Rebecca. Rebecca's adventures launched discussions and activities that provided a basis for encouraging critical thinking. The discussions and activities fit well into the social studies curriculum. We planned for two thirty minute sessions a week.

I began by giving my group and a control group a pre-test. Before we had our first session we lay some ground rules concerning listening to others, waiting your turn to contribute your thoughts, and treating other people's ideas with respect. Since this was at the beginning of the school year, these were some of the same rules we were trying to learn to use during regular classroom time.

A circle on the floor with everyone facing each other seemed to be the best arrangement for our discussions. However, the children were so restless the first few times we sat in a circle that much time was wasted in trying to settle down. It would have been better if we had used a circle arrangement in the classroom for other activities before we began. The normal classroom day is fairly well structured. Pushing back the chairs and sitting in a circle and looking at everyone created too much stimulation. Introducing a new area for discussions that could not work without listening and reacting added to the stimulation. Small children can accept only one new procedure at a time. I knew this, but I was too eager to get started.

The children loved the story about Rebecca from the start. For some of the children, responding to questions and adding to other children's contributions came easily and naturally. But from the beginning the shy children chose not to participate when given a chance. It was a painful time for them and we had to work at drawing them out and giving them a chance to contribute.

Beginning activities included exercises that were already familiar to the children. We looked for likenesses and differences and learned the terms "similar" and "different" and "similarity" and "difference." We learned to distinguish between "reality" and "whimsy".

Good listening skills were an absolute must. Those who would not listen had a difficult time becoming involved.

We also needed to use our imaginations freely and in a creative way. In the beginning some children would get bogged down in the humor of the story. They could not enjoy the funny parts of the story and then leave the funniness to go on to use their imaginations to become creatively involved in our conversations.

When the class began to really think with imagination they began to show signs of genuine critical thinking. Imagining was the spark that began shaping the investigative process for these young minds.

Not all of our lessons were successful. Part of my task was to choose the activities that were best suited to my children's abilities. I didn't always choose wisely, and I'm sure I left out some that might have worked well. I tried to include those activities that were necessary to activities that would come later. In some instances it was clear that more maturity was needed for a lesson to succeed. I found that some of those lessons could be handled better by the children later in the year.

There were times when too much teacher involvement was necessary. Often there was a need for me to keep the class on the subject at hand. Some discussions triggered irrelevant thoughts and at times these thoughts were more exciting than the planned lesson. At other times it was necessary for me to clarify the children's statements. They often gave examples when trying to make a point. "When my dog died I cried, but I'm not crying now," meant that certain things happening to you can make you cry but just the thought of them doesn't make you cry.

Planned lessons were for the most part good learning situations that were interesting to the class. They were also springboards to other outstanding lessons, especially in the science and social studies areas. In several instances our conversation would depart from the planned lesson into another area of the curriculum that seemed worthwhile to continue. When a frog was discussed as part of a planned lesson, several children led us away from my plans of discussing causality. One child observed that perhaps a kiss could change a frog since frogs are strange because they turn into a frog from a fish. Another child contradicted the first one with the observation that a tadpole is not a fish. Thus we were led into the study of the life cycle of a frog. Many conversations which began in our Rebecca circle prompted very interesting "show and tell" materials that set the stage for other good learning experiences that would never have taken place otherwise.

I feel strongly that this early age is ideal for beginning to nurture a community of inquiry. Young minds are naturally curious and their spirit of curiosity has not yet been threatened. They do not make fun of each other when some answers are not as good as others. They have not yet learned about being "put down" by their peers. Never during any of our sessions did I hear a snicker or a word of criticism about another child's response. If in talking about orange elephants one child remembered that her orange cat had kittens and she spontaneously volunteered the information, the rest of the class was most interested to hear about it. Perhaps the teacher was the only one who had a problem with this, and I had to be careful to redirect the conversation to the original subject without making the child feel threatened.

Participation was never as balanced as I would have liked. The outgoing children were always the most eager to participate and they never stopped trying. Those less outgoing children were anxious to get in on the excitement and they made an effort to contribute. Only the very shy ones would sit back and refuse to take part orally. I could see their eyes light up and see their heads nod or shake to agree or disagree. For them this seemed possibly the best time in their lives to draw them out and help them overcome their shyness. The curiosity was definitely there. A good teacher needed only to nurture and direct it.

This was also a good vehicle to help lengthen the attention span. Paying attention was easier when others were excited about what was going on. Daydreamers did float in and out with their thoughts, but this seemed less of a problem when we discussed Rebecca's adventures than when we had regular social studies lessons.

Another problem for this age was to hold on to their own thoughts while concentrating on what someone else said as they waited their turn to speak. The children made improvement in this concentration skill and at the same time learned to respect the rights of others to have a turn to speak. I felt this created a bond of caring for each other within the class. Sometimes a child would tell me that someone else had not had a turn even while holding his own hand up to speak. This feeling among the class members improved egos. They felt that they were listened to and that what they had to say was important to others.

Ideally this program would work better if small groups of no more than twleve children at a time worked together. This would help insure those students who are quiet and shy an opportunity to make contributions. One of the most difficult problems was in drawing out those quiet ones. One way we tried to encourage the quiet ones to participate was to have small group sessions including five shy ones and one or two moderate participants who could act as catalysts to motivate conversation but who would not monopolize the conversations. When our small group session would end we would bring our thoughts to the larger group and let the shy ones tell what they had discussed. Some talked only at these times. Others began to open up more in the large group. By the end of the year a few spoke up more easily, though they were never as exuberant as the more outgoing ones. One painfully shy child began to take a more active part in other class activities as well.

The small group sessions worked best when those quiet children could draw on their past experiences for ideas. It worked especially well when we began discussions about the intensity of feelings when one experiences something as compared to the intensity of feeling when one remembers the experience. There was good discussion about the reason Rebecca gave for crying. The children gave an excellent discription of the day their teacher came to school in a silly hat and glasses and made them laugh. Their comparison of their reaction then and their reaction now as they were talking about it was much better than I had expected. These children would often duck their heads to nod yes and here they were babbling away. They continued verbalizing their thoughts well as long as they could use past experiences to relate to. When they were back with the larger group they were not nearly as talkative but they did talk and that was a major accomplishment.

The children's past experiences had a good deal of bearing on whether or not a lesson was successful in the large group, too. Some of the activities came too early in the year and many children were not mature enough to handle thoughts which were not directly related to their past experiences. For example, when we discussed Rebecca's 347 questions running around in her mind and we tried to think of questions which we had not come up with answers to, I got responses such as "I asked my daddy a question and he didn't hear me so I didn't get an answer." Later in the year we tried this exercise again and the responses were "I wish I knew how a caterpillar knows when to spin a cocoon," and "I haven't been able to figure out how a brid can fly." These thinking responses were related to earlier science studies.

The size of my group, twenty-six children, made it difficult to hold the whole class' interest for extended periods of time. I also found that external conditions were a factor in whether or not a lesson was successful. The day of a program was not a good day for a lesson. Unsettled weather had adverse affects on fidgety children. Interruptions of any kind caused a problem. I found it necessary to plan around the schools other activities and to plan to be flexible also.

Another problem for us concerned the amount of time often needed to complete a lesson. Fifteen or twenty minutes seemed to be as long as the entire group could concentrate. Many lessons had to be done in several sessions and this required a lot of reviewing. The reviewing was necessary to bring the story and our previous thoughts together and to re-establish the interest and enthusiasm of the last session. All of this caused much more teacher participation than I would have liked. On a few occasions there would be a few children who could lead the review, but this often encouraged them to monopolize the lesson. As I developed more expertise I found it a good idea to end a divided lesson with "The next time we meet I want to see how many of you can remember . . ." This didn't always work but it worked enough times that I tried it often. I also learned not to divide a lesson over a week-end because the amount of time between divided lessons had a great deal of effect on re-establishing enthusiasm.

Besides a need for past experiences I noticed several other factors that were present in most of the lessons that were extremely successful. Humor was one ingredient that made for a sure success. Discussions abut reality and whimsy, conscious attempt not to think about something, and the use of analogies were among the lessons that made such an impact that they were referred to over and over. Intriguing vocabulary words made some of the lessons well received. They loved the word "whimsy" and they continued to use such words as "actual", "probable" and "possible" in proper context. Mystery and imagination in a lesson made it especially interesting and fun. When we came to the lesson that included the activity of finding out how many petals were around the roses, I was tempted to leave it out because I felt it would be over their heads. I decided to try it to satisfy my own curiosity. I showed the cards of dots and the only clue I gave was to stress that you could find the roses only if you could really use your imagination. I was a mixture of dumbfounded and proud when finally one of the "quiet ones" came forward and said "Those dots in the middle could be the roses." It took a while longer to get the number of petals correct, but not nearly as long as I had imagined. They loved this "game" and wanted to play it "on" someone

else. They tried it on a student teacher and the excitement was high when the teacher had more difficulty imagining than they had had. They kept telling her to use her imagination. At this point I truly felt my little ones had arrived!

For the most part, the lessons that did not meet with success were the ones that were over their heads because they had no past experiences to help relate to them. They could not understand the difference between prescriptive and descriptive use of words. They accepted the fact that a person could change some in appearance, but they would not accept a drastic change. They could not describe thoughts without much teacher prompting. And they could not compare themselves to famous people beyond comparing looks. When we had these lessons I felt the class turn off their interest. Some I tried again at a later time and I got much the same responses. Once I was even reminded that "We did it before and we didn't like it." Perhaps the teacher approach was lacking or perhaps this class just couldn't relate to these activities.

Among the exciting results I experienced was seeing a child's eyes light up when we were deep in a science or reading lesson and hearing that child say, "Like in Rebecca!" Knowing that he could apply our "thinking lessons" to other areas made the frustrations of time juggling and lessons that missed the point seem very insignificant to me.

In one science class we were listing ways to conduct an investigation. As our list grew (ask someone who knows about it, read about it, do experiments, etc.) one child spoke up, "Sit in a circle and talk about it like in Rebecca." This was further assurance to me that our discussions were meaningful to the group and were apparently giving the class a sense of accomplishment.

While the lessons seemed to be helping improve the children's abilities in thinking, they also did wonders for my moral. To listen to them use and understand words and phrases not ordinarily used by six year olds made me feel that what we were doing was worth the time and effort spent. I felt a sense of accomplishment when I heard observations such as "All the stories we've been reading are whimsical," and "That's possible but it's not very probable because . . ." And these were said in a way not meant to be "cute."

The more vocal students felt no inhibitions in questioning statements made by teachers and even some statements in books we read for enjoyment or in our other classes. They wanted things clarified and correct in their own minds. Some used their reasoning skills in ways not generally expected for six year olds. "That doesn't make sense to me because . . ." was a statement I was happy to hear. Most first graders accept whatever the teacher or the book says.

Parents have commented on a new level of curiosity some of the children are displaying at home. They are willing to tackle harder reading to satisfy that curiosity. Many discussions begun at school have gone home to be shared there. One child brought a National Geographic magazine to school to show that in some places it does snow in July. His father said that he insisted on learning to read some of the words he didn't know because he wanted to read some of it to the class. Another child wrote a simple story about Rebecca for us to use in our circle. She made Rebecca's elephant come to life and she used "probable" and "possible" statements in her story. We had a good time with her story and we made some clever illustrations for it. Many mornings I was greeted with pictures of the previous days discussion made at home and brought to school to share with the class.

The class as a whole has shown growth in understanding why it is important to think for yourself. Some of the members of the class have exhibited a potential for creativity that began with their interest in our thinking sessions. Others have learned to respect the rights of their classmates. A few have blossomed out of shyness.

This teacher has grown, too. After twenty-two years of teaching little ones I thought I knew what was "possible and probable" to expect of six year olds. But my expectations have grown with this year's realizations.

The time spent with Rebecca has been worthwhile.

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