## A Speech and Language Pathologist's Experience with Analytic Teaching

"Analytic teaching? What is that?" This is a question that I have been asked many times since I changed my major area of emphasis, on my master of arts degree plan, from English to analytic teaching. This was a question I had also asked when a friend, who had taken courses in this area, recommended this course of study to me. Fortunately I took my friend's advice and have been reaping the benefits ever since. As a speech and language pathologist, I have worked with students who have language disorders for a number of years. These students generally have a deficit in the area of abstract reasoning and thinking abilities. Therefore I have worked in this area in my profession for many years, attempting to be innovative in my methods of remediation and constantly searching for a new and more appropriate technique. Never have I used a better, more successful method than the one that Matthew Lipman has designed and published. No longer am I infiltrating my ideas into the lesson, nor am I interjecting any of my more biased opinions. Therefore I am not leading my students to reason and think as I do. In applying Lipman's methods, I only motivate and encourage my students to reason and to think for themselves. This they have learned to do in a much more appropriate manner, using the method of philosophical inquiry. It has been an amazing and rewarding experience for me as well as for my students.

I began using Lipman's series, Harry Stottlemeier's Discovery, with some of my students during the spring semester of 1984. I was elated with the results I observed in my students and shared this with my supervisor, Linda Doyle. Mrs. Doyle was somewhat familiar with this method of inquiry and asked me to introduce analytic teaching to the other speech and language pathologists in an inservice session in April of 1984. In doing this, I was able to arouse an interest in some of my colleagues, one of which has taken a number of hours in analytic teaching since then, and another who will begin taking courses this summer.

Last summer, I gave considerable thought as to how I would organize a class for my practicum. I would be using Lipman's analytic teaching methods with my middle school language disorder students. I decided to utilize this method with two separate classes for two reasons. One of my reasons for this was my knowledge of the frequency with which students move away during the school year. At Monnig Middle School in the Ft. Worth Independent School District, we have a large population of students whose fathers are in the Air Force. Quite often a student's father will be transferred to another area during the school year. I felt that if I began with two classes and experienced losing a number of students during the year, I would probably be able to maintain at least one class. As it has turned out, my forethought was correct, for this is exactly what happened. By mid-semester I only had enough students, who were involved in my practicum study, for one class.

My second reason for choosing two separate groups was for an experiment of my own. I wanted to observe how the Lipman method worked with a group that was functioning intellectually higher as compared to a group that was functioning intellectually lower. I chose six of my higher functioning students for one group and six of my lower functioning students for the other group.

I was not certain that *Harry Stottlemeier's Discovery* would be appropriate for my higher functioning group, since it is approximately at the fifth grade level. I wanted to investigate a higher level series but did not have the funds to do so. I again spoke with Mrs. Doyle and encouraged her to buy most of Lipman's series of books which are at different levels. These materials were purchased with the understanding that only those speech and language pathologists trained in the analytic teaching methods may be allowed to use them. When the new materials arrived, I discovered that the *Pixie* series was too low for my lower functioning group and that *Mark* was too high for my higher functioning group. Therefore, I have used *Harry Stottlemeier's Discovery* with both groups.

My next decision was where to begin in this series, since I had used the material in the first three chapters the year before. If I started with chapter one, some students would be repeating and might become bored. Other students, who had not had this exposure, might feel lost. I decided that it would be best to start at the beginning. The students who were repeating just might discover something this year that they had not discovered last year.

At the first meeting of each of these groups, I explained to the students that they were very lucky, for they had been chosen to be in a very special class this year. I told them that we would be using a new method in order to increase their reasoning and thinking skills. I explained that some of them had been involved in this the previous year. I told them that we would be reading Harry Stottlemeier's Discovery and that we would read a chapter, then draw leading ideas from that chapter, and then we would discuss our leading ideas. The fact was stressed that they should not be afraid to give their opinions and that no one's opinion would be wrong. They liked the idea of not being wrong, for these students often fail in the regular classroom and have been wrong too many times.

The students who had been exposed to *Harry Stottlemeier's Discovery* last year were of a mixed opinion. Some were eager and said that they had had fun with it last year. Others were not so eager and voiced that they thought it was boring. The eager students assured the students who said that they had been bored that they were wrong and that we would have lots of fun.

I had to alter the method of presentation of Harry Stottlemeier's Discovery somewhat in order to use it with my learning disabled students. We have read the first seven chapters of the book this year, one chapter at a time. I wanted the students to take part in the reading of the chapters, but I realized that this would be a difficult task for many of them since they read at very depressed levels. I therefore told my students that they could read if they chose to but that I would appreciate it if they would help me with the reading of the chapter. Most of the students were eager to read, even some of the poorer readers. I found that the shy, withdrawn student was less likely to join in the reading activity, even if he or she were a good reader, than the more outgoing student who was a poor reader. The poorer reader would usually try to struggle through the reading. When the poorer readers read, I sometimes repeated a sentence when I felt that the reception or understanding was lost due to the chopped-up, faulty reading. Generally, most of the students were eager to read and did not want me to help them by reading my part of the chapter.

After each chapter was read, the students chose the leading ideas or important things that happened in that chapter, which we would later discuss. It is very difficult for a student who has a language disorder to recall an entire story. Therefore, I had the students go back to the first page of the chapter and choose the leading ideas, page by page. This technique aided the students in the skills of short-term memory and in the proper sequencing of events.

I discovered that the students were very good at selecting the leading ideas. They usually selected the ones that were of importance to the story, the ones they wanted to discuss, and the ones that appeared to be questionable. Sometimes, because of his or her language disorder, a student would have difficulty in stating a leading idea. When this occurred I would ask, "Do you mean that \_ or "Are you saying \_ ?" The student would then agree with me or explain further so that we could all understand the leading idea that he or she had stated. When these leading ideas were written on the board, the students seemed to feel a sense of importance. After class I copied the leading ideas in my class log. I only had these students for forty-five minutes each week, and reading a chapter and selecting the leading ideas for that chapter took the entire forty-five minutes.

In comparing my higher level group with my lower level group, I found that both groups were about equal in their ability to select the leading ideas. However, my higher functioning group used better vocabulary in their wording, more appropriate sentence structure, and stated the leading ideas in a more understandable manner than the lower functioning group did. The lower functioning group showed an eagerness, however, that was never displayed by the higher functioning group. Perhaps *Harry Stottlemeier's Discovery* is at a more appropriate level of interest for the lower functioning group than for the higher functioning group.

Before the next class meeting, I would look over the exercises in the teacher's manual that accompanies Harry Stottlemeier's Discovery and select exercises that would be appropriate with the leading ideas selected by the students. Sometimes I would consider discussing one word in particular such as "friend" or "helping." There were also times when I made up exercises of my own to use. The students' favorite exercise was "The Circle Game." This game was played using standardized sentences. The students learned to play the game quite well. I made a circle on the floor using masking tape and labeled the circle a particular class or category such as "animals." The students were then labeled

something that would fit into that class, such as "snake," "bear," or "lion," if the class were animals. I would then say a standardized sentence pertaining to the class or category I had chosen. From this sentence the students would know whether to step into or out of the circle. They played the game well, and thoroughly enjoyed it, asking to play it over and over again, which we often did.

At the next class meeting we would go over the leading ideas that had been selected the week before. I would then select a leading idea, or a group of leading ideas, for sometimes some of them were interlocking, to begin the discussion. (I selected the leading idea for discussion most of the time since another trait that these particular students usually display is disorganization.) Most of our discussions were quite interesting. Again the lower functioning group showed much more eagerness during the discussions than the higher functioning group did. I had to sometimes ask the students if I was correctly understanding what they were saying, for their thoughts and ideas are often disorganized.

There were a number of areas of difficulty involved in the discussion. One difficulty was learning to formulate my opinion about the topic being discussed into a question rather than a statement, or else, not mentioning it at all.

Timing was, and remains to be, an area of difficulty. It is often questionable whether to move on to another topic or to continue the discussion of the topic at hand.

Another area of difficulty was in persuading the students to stay on the topic and not wander off into another area too quickly, or stifle the discussion by relating personal experiences. This was particularly difficult for some of my emotionally disturbed students. It is rather difficult to put into words how I accomplished this. I can only say that it requires a little cunning, tactful finesse.

The most difficult tactic that I had to develop was in persuading the students to interact with each other during the discussion. I had to learn to ask my shy, withdrawn students how they felt about the topic a number of times in order to get them into the discussion. When they became a part of the discussion, more ideas and opinions were brought forth. This would further enhance the topic of discussion. I also had to encourage the students to direct their comments to the student with whom they were questioning or to the group, rather than to me. When I finally observed this interaction, I was elated!

I was often surprised, and sometimes shocked, by the level of reasoning and the methods of verification used by my students. There appeared to be a definite improvement in this area as the school year wore on. The reasoning definitely became more sophisticated. If I had to choose the particular topics or leading ideas that the students excelled in, it would have to be standardized sentences and generalizations. These topics were often brought out in discussions by the students themselves. They definitely understand them and are able to transfer this knowledge to other areas.

From this paper it seems, thus far, as if each session was successful and rewarding. This, I am afraid, is not so. On one occasion I left my materials at home. That day was almost a disaster. Several of the students were not having a good day that day, and the absence of the proper materials

increased the degree of inappropriate behaviors. That particular day we had to discuss why the lesson was boring. I accepted my part of this "disaster," and the students admitted that they should also accept a part of the blame. I was grateful when the bell rang for the next class that day. However, some progress was made because we were able to discuss the problem.

The week following this "disaster," I attempted to use Lipman's exercise on "Inductive Reasoning" on page 112 of the instructional manual. Rather than beginning with an easy problem, like my intuition told me, I decided to keep the exercises in their proper, sequential order. I then began with number one, which discussed water being boiled at 212° Farenheit in several places at sea level. I realized that this would be difficult for my class, but I decided to attempt it. The children could not understand that even though water boiled at this temperature anywhere in the world, it was not a large enough sample. I decided to go on to an easier problem in order to prove my point. No matter what example I used, the children could not grasp the idea of having a large enough sample and of using only the information in the statement. I really struggled with this, staying on the exercise much too long. The students did improve when I continued to do some easier inductive reasoning exercises on pages 113-121.

All in all, I feel that the exercises involving open discussions of a word or a topic were the most successful and the most enjoyable. Students often changed or strengthened their ideas and opinions by what was discussed in class. It was during these discussions that most of the interaction between students took place. They directly challenged each other's thoughts and/or opinions. When we discussed "thoughts," many of the class members felt that they could read someone's mind. Elton disagreed and quickly challenged the class to guess what he was thinking. Of course, he proved his point.

Three boys in particular were very quick to interact and challenge the others in the class. Two of these boys, Elton and Robert, would join in the discussion but would also listen intently and ponder what was said. Victor, a real talker, lead a lot of the discussions. However, Victor often made statements about the topic before he thought it through, but the rest of the class was able to reason with him. Victor quite often came up with some very good ideas. John has been an excellent student and appears to have made a lot of progress. He did not challenge the other boys' ideas, but he joined in the discussion, listened, pondered what was said, and then added some important thoughts and ideas. Because of his severe language disorder, Billy has had a particularly difficult time remaining on the topic of discussion. Reasoning was particularly difficult for him. I have done some private work with him and am pleased to report that he is making improvement rapidly. Paul is very "lively" and this often interferes with his ability to listen. He has a particularly difficult time in keeping his thoughts organized. He loves to join in the discussion, but his deficit really limits his reasoning abilities. Arthur is very shy and really has to be coaxed to join in the discussion. When he joins in, I find some excellent reasoning and thinking occurring. He never

challenges the other boys, and if his ideas are challenged, he becomes very quiet again and seems to give up.

As to which group made more progress in this method of philosophical inquiry, the lower or the higher functioning group, I cannot truthfully say. From my observations, it would appear that the lower functioning group made more progress. Also, I have only one of my higher functioning students left in my practicum group. Therefore, even after formal testing is completed, I will not have a true, measured result.

In my excitement over the results that I quickly observed after employing this method of analytic teaching with my practicum language disorder groups, I decided to use this method of inquiry with some of my other students that were not involved in my practicum study. With one of my other language disorder groups, I used the book, The Lemming Condition. With still another language group, I have used articles from various magazines, such as Read and National Geographic World. I applied philosphical inquiry exercises, similar to the ones Lipman uses in Harry Stottlemeier's Discovery and some others literally off the top of my head, to the stories in the book and the magazines. The students enjoyed these stories as well as the exercises. The application of these skills has appeared to be somewhat slower than the application of skills that I observed in my practicum groups. For a while, I was not observing as much success with these groups as I was with my practicum group, but now the understanding and application of these skills appears to be nearing the same skill level as that of the practicum group.

Of particular interest to me are the autistic children that I work with. Their reasoning is particularly inappropriate, especially if it involves using abstracts. I have applied the analytic teaching techniques to some of the material that I use with a higher functioning autistic boy and have observed some improved reasoning and thinking skills. We have discussed such concepts as "funny," "sad," "little," "big," and "grow." These are very difficult concepts for an autistic individual since they are not always observable and since the criteria may change. I thought we had made a lot of progress discussing "grow." Craig had been naming things that grow and would then tell me their function. He did quite well, but when he named grass and told me that, "You smoke it," I could not withhold my laughter. I had a lesson in reality that day!

The parents of these students are extremely interested in learning more about this method of inquiry so they may use it also. When working with an autistic student, there has to be a constant continuity of teaching techniques at school as well as at home. Therefore, I plan to introduce these parents to some of these techniques.

This method will only be serviceable with the higher functioning autistic individual. Unfortunately, very few people in this population function at a higher intellectual level. Many have little or no language. However, I am pleased with the results I have seen and am of the attitude that it would be beneficial if more of those who work with the autistic population were trained to use the methods and techniques associated with analytic teaching.

This method of philosophical inquiry has helped me also. Since I have been trained in these methods, I find myself applying them in the different avenues of my life. I believe that I now am able to reason and think more critically than I did before. Often I find myself pondering over something that was said or that I read, thinking critically about its validity, and applying it in numerous ways, in different situations, searching for an answer.

I enjoy telling others about analytic teaching, too. I find that there are very few people who are familiar with it. When I give them a brief description of what it is and relate how successful it has been with my students, I find that they are hungering for more information.

The highlight of the year came when my school asked me if I would like to video tape an analytic teaching session. I have been sharing my experiences with some of my colleagues, and it seems that the students have been talking about how much fun it is in their other classes. I, of course, immediately accepted the invitation and shared the news with my students. The students were so excited and could hardly wait until the day of the filming arrived! They constantly stopped me in the hall to talk about it, and they told all of their teachers and friends that they were going to be in a "movie."

We had just read chapter six when the film date arrived. Therefore, I chose to film a discussion concerning the mind, the brain, and thoughts. The discussion was good but it was not our best. The students were really scared and nervous. This appeared to inhibit the level of reasoning and thinking that they have attained. They were very proud as they watched the film. The film is of most importance to me, for it clearly pointed out to me those things that I did correctly as well as those things that I did incorrectly. I observed some things that I was not aware that I did. The students gained from this also, for as they watched the film, they recognized their good points as well as their errors.

Judy Welles