Harry Stottlemeier's Discovery and a Fifth-Grade High-Ability Language Arts Class

I. WHAT IS ANALYTIC TEACHING?

Analytic teaching is a method of teaching which attempts to enable students to discover meanings. Matthew Lipman, founding father of the Analytic Teaching program, defines education with this statement: "Whenever meaning accrues, there is education."

Analytic teaching is built on the premise that children crave a life of meaningful experiences. With this in mind, Lipman designed his program so that the principal role of the teacher is to guide children to find meaning for themselves.

Lipman believes that children do not acquire meaning by simply learning the contents of adult knowledge. He contends that for children to find meanings they must be taught to think and, in particular, to think for themselves. If students are able to think clearly and think for themselves, then they are able to learn with more vigor and depth. Essentially, learning at its best is when a learner is able to make sense of new information and able to figure out how the new information relates to the rest of his world. Developing thinking skills will give students the capacity to make connections, draw distinctions, assess facts critically, make correct inferences, and draw conclusions. All these abilities aid children in their quest for meaning.

This year I have used the Analytic Teaching Program designed by Matthew Lipman with my 5th grade high-ability language arts class. This program consists of a novel entitled *Harry Stottlemeier's Discovery* and a teacher's manual.

The program uses a combination of philosophy and logic to teach thinking skills. The aim of the program, according to Lipman, "is not to turn children into philosophers or decision-makers, but to help them become more thoughtful, more reflective, more considerate, and more reasonable individuals." It attempts to improve the judgment of children.

II. COMMUNITY OF INQUIRY

Vital to the success of the program is the building of a community of inquiry where students feel free to express their thoughts and ask questions. By means of discussion, students discover how their minds work and how to think clearly. There are criteria which help these discussions of inquiry to be successful. There are also definite actions that can destroy discussions of inquiry.

I received training on how to lead a discussion of inquiry the year prior to using Lipman's program with my class. However, I have discovered that it also takes practice to successfully lead such a discussion.

I've been very pleased with the development of my class this year as a community of inquiry. Students have learned

to listen to one another, and they have learned to give reasons for what they say. However, throughout the year, I feel I was too dominant in the discussions. For example, instead of addressing their peers, students continued to direct their discussions through me. There were days when students carried the discussion and I said very little, but this hap-

try to improve.

III. SPECIAL CIRCUMSTANCES OF MY CLASS

pened seldom. This is one area in which I shall continue to

In my language arts class, we had a large group analytic thinking lesson each week for one hour. The large group consisted of 33 students. Every other week, we also met in small groups, of 16 or 17 students, for 30 minutes. I always enjoyed our small group time more than our large group time. More students were able to address the topics and I found it easier to observe all the students, making sure they all stayed "tuned in." Also, during small group time, students were able to hear one another better in our open school, as we were able to sit closer together. I had several students with very soft, quiet voices and they had to work hard at speaking loud enough to be heard.

Generally, each student in this program has a copy of the Harry Stottlemeier's Discovery novel so that the story can be read by the students. This is beneficial, for the reason that students can skim through the text when necessary to find statements which give evidence or justification for various opinions they may hold. My class, however, was not able to have student copies of the novel due to a request from my district administrators. Therefore, I read the novel to them orally. I considered this somewhat of a handicap, but with the use of note-taking and specially typed handouts, we were able to get by adequately.

Early in the year, I had planned to use several supplemental activities which would serve to enhance Lipman's program and I did use some. However, as the year progressed, I realized time was very limited, and I focused my efforts on Lipman's program, putting the supplemental activities aside.

IV. LOGIC IN THE ANALYTIC TEACHING PROGRAM

From the beginning, my students seemed to enjoy the logic part of Lipman's program and most of them learned to do it accurately and quickly. Once several students were able to do the logic well, I allowed them to help the other students. This usually worked very well, because everyone was busy and no one had time to get bored. Also, I found that by allowing students to explain the logic to others, they actually became clearer about it themselves.

Occasionally, I observed several students who became quite frustrated with standardizing sentences properly. When this occured, I reminded them that standardizing sentences would not be a graded activity and to consider it a puzzle. Amazingly, this bit of advice really seemed to work! Some students even referred to their sentences as "puzzles" and were quite proud of themselves when they had worked the "puzzle" successfully.

I was continually surprised that grades were not necessary to motivate my students to pay attention or to work hard during analytic thinking class. Sometimes when I assigned short homework assignments, I found that most students did the homework even though it would not be for a grade. Sometimes, I attributed this to just having a very good group of students, but other times, I realized it was simply because the students were so excited about what we were doing.

It has been my experience that, when working with highability groups, grades are of high importance to students and grades are usually one of my main sources to motivate them to learn. It was refreshing to have one subject this year that was not graded and could simply be enjoyed. It was also very nice to see students work diligently at a subject just because they liked it. (This, however, is a generalization. There were students, although very few, who did not find analytic thinking class particularly interesting.)

Earlier I mentioned that my students seemed to enjoy the logic and most students learned to do it accurately and quickly. However, here I must mention that there were days which were exceptionally challenging. One of these days was the day we discussed the statement: "One can only go into a forest half way." Most of the class had difficulty visualizing the meaning of this statement. I decided to take the class outside so that we could use the lines on the sidewalk to help illustrate its meaning. At this point, about half the class began to understand and accept the statement, so I asked students to break into small groups and explain it to each other. I quickly noticed that my strategy was failing for this lesson. My students were not listening to each other but instead they began intensely defending their own point of view, so I gathered them back together and attempted to continue our discussion more rationally. This time, I directed the discussion so that it was truly a discussion, rather than an argument.

Consensus was not achieved that day. After discussing this problem with colleagues, I concluded that there may be particular logical concepts that some children are just not ready to understand. With this in mind, I decided to be satisfied with the progress of the class members who did eventually come to understand the statement and not worry about the rest for now.

There were other days which resulted in success but were very difficult for the students as well as the teacher. These days were difficult for me because some students needed more explanation to discover certain relationships and make distinctions than what I was prepared to give. The students who understood the difficult concepts were also unable to help those who could not. I found myself struggling to come up with explanations easy enough for all students to understand.

An example of such an incident was a day when we were trying to agree as to the correct standardization for the ordinary language sentence, "Quite a few paints aren't poisonous." About five students were convinced the sentence should be standardized, "Some paints are poisonous things." Most of the class disagreed but none of us were able to give a clear and convincing explanation as to why. At this point, I asked the class to help me come up

with a way to illustrate the problem on the chalkboard. The following examples give the step-by-step method we invented to help all classmates agree to the proper form of standardization.

Use to help explain sentence 12 on handout #17

Ordinary sentence:

OUITE A FEW PAINTS AREN'T POISONOUS.

- I. Which of the following illustrations could be true of the statement above?
 - P denotes poisonous things.

N denotes non-poisonous things.

The large box which surrounds the paints is meant to symbolize all the paints in the world.

to s	ymboli	ze aii th	ie paint	s in th	e work	1.	
А.	P	P	P	P	P	P	P
В.	Will ill	ustratio	n A wo	ork? _			
	N	N	N	N	N	N	N

C.					
	(N)				(N)
		(P)	(P)	(N)	
			$\overline{}$	 $\overline{}$	

Will illustration C work?

Will illustration B work?

D.	P	N	N	N	N		N
		=			_	<u> </u>	

Will illustration D work?

Е.	N	P	P	P	P	P	P

Will illustration E work?

- II. Now mark out (put a large X across) the illustrations that did not work because we will not need to be concerned with these.
- III. We know four different ways we could try to standardize our ordinary sentence.

#1. All	are
#2. No	are
	are
	are not

Let's try each different form of standardization to discover which form will work for all three illustrations. If a form will not work for all three illustrations, then we should not use it.

IV.	#1. All	paints	are	poisonous paints	
	Does	#1 work for	illust	ration B?	
	Does	#1 work for	illust	ration C?	
	Does	#1 work for	illust	ration D?	
	Shoul	ld we use sta	ndard	lization form #1? _	

#2. No <u>paints</u> are <u>poisonous paints</u> .
Does #2 work for illustration B?
Does #2 work for illustration C?
Does #2 work for illustration D?
Should we use standardization form #2?
#3. Somepaints arepoisonous paints
Does #3 work for illustration B?
Does #3 work for illustration C?
Does #3 work for illustration D?
Should we use standardization form #3?
#4. Some _paints are not poisonous paints .
Does #4 work for illustration B?
Does #4 work for illustration C?
Does #4 work for illustration D?
Should we use standardization form #4?
Now use the line below to write the current standardization form of our sentence.

The class was aware that we could have made several different illustrations with various combinations of poisonous and non-poisonous paints. However, we agreed that the five different combinations we used were sufficient to help us find the correct form of standardization for our sentence.

As I have mentioned before, days like these were especially challenging, but they were equally rewarding. Most students were very enthusiastic about, as we called it, "figuring things out!" Also, I learned that I can help students figure out logical problems with greater success, if I elicit the help of classmates and use my own wits to come up with some type of visual representation of the problem.

On another occasion, my class tried to find a good visual representation for a different problem. This time we were not so successful. This problem had to do with the following statements:

Jack: "You can't believe anyone."

Ginny: "So it follows that we shouldn't believe

what you've just said."

About nine members of my class never understood why this is an example of good reasoning. Many were convinced that we should not believe Ginny or they said Ginny could be lying. These nine students were possibly just not ready to understand a problem at this level of difficulty. However, I have still not given up the search for a method of explaining these statements so that all my 5th graders can understand why they are logically sound. I am convinced that there is such a method. I just need to find it.

V. PHILOSOPHY IN THE ANALYTIC TEACHING PROGRAM

It is difficult to separate the logic and philosophy in this program because they are interrelated. However, some of our primarily philosophical discussions included the following topics: (1) the difference between discovery and invention; (2) truth by definition or by evidence; (3) the meaning

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of the reply "so what?"; (4) personal identity; (5) figuring things out or inference; (6) stereotyping; (7) nonverbal significance of human actions (Fran's leaping); (8) what is it to be proud?; (9) what is thinking?; (10) the difference between having thoughts and thinking; (11) are thoughts real?; (12) boredom; (13) what is understanding?; (14) ambiguity; (15) vagueness.

During these discussions, I worked especially hard to encourage students (1) to listen to each other, (2) to respond to one another's comments when appropriate, (3) to give reasons for what they said, and (4) to refrain from bringing in information that was not helpful to our discussion.

Two of these topics that I consider of particular value are those of ambiguity and vagueness. By helping students discover peculiarities in our language such as this, we help them be aware of situations that could otherwise mislead or confuse them.

During my course of study at Texas Wesleyan, one of my most valuable realizations has been in the important relationship between language and learning. This quotation from *Teaching as a Subversive Activity* by Neil Postman and Charles Weingartner sums up my realization well:

"... all of what we customarily call 'knowledge' is language. Which means the key to understanding a 'subject' is to understand its language."

I feel that by teaching children to be sensitive to language, we enable them to better acquire meanings for themselves.

All our discussions of inquiry on philosophical issues were profitable, and of course, some more than others, but the topic of personal identity was perhaps one of the most interesting from my perspective. I say this because initially my students felt quite confident about knowing what made them them, or rather, to state the question as it ws stated to them: "What makes you, you?" As I began asking questions from the Harry Stottlemeier's Discovery teacher's manual (page 35), the class became very confused, but they also began thinking about themselves in very different ways. It was exciting to watch my class be so intensely engaged in finding a solution. We did not find a solution that all members could accept, but most students seemed to become clearer about the issue.

One of the philosophical topics that seemed to have the most interest appeal to my class was the topic of boredom. This was surprising to me, because I initially did not find the topic particularly interesting. However, this lesson was one of those very successful days when the students did most of the talking and I merely directed the discussion. On this day, I had the class break into groups of three and gave each group a card with a different set of questions concerning boredom. After each group had had time to discuss the questions thoroughly, we reassembled in our large group. I then asked the individual small groups to pose their questions to the large group and to try to lead the large group to a consensus on each question if possible. These small groups then were able to do most of the discussion directing and I was able to spend more time observing the progress of the discussion. On this day I realized my students seemed to have clearer ideas on boredom than I did. I enjoyed learning with them!

VI. DIFFICULTIES

I feel that the Analytic Teaching program was extremely profitable for my students. My greatest regret is that there was not more time available to use on the program. As a result of the subject-time allotment reforms, there is little extra time in the school day to use for such programs. I had to be very careful that I did not use this program at the expense of the Reading, English, Spelling and Writing programs my district uses. I justified using this program as a language arts enrichment activity. Only because I taught a high-ability group that was capable of mastering the regular curriculum at a rapid rate was I able to have enrichment activities which were, of course, the activities of the Analytical Teaching Program.

I find this fact very distressing, because I strongly believe all students should have guidance in learning to think clearly. It is possible that students who are poor achievers are poor achievers simply because they lack the thinking skills necessary to make their learning experience meaningful. They are not motivated to learn in school because their schooling is not making sense to them. They are the very students who need a thinking skills program the most.

Lynda M. Copple