PHILOSOPHY THE FIBER OF DEAF EDUCATION

INTRODUCTION

This paper will discuss (a) the relationship of philosophy and logic to language structure and (b) the integration of philosophy in a conceptually based curriculum for the hearing impaired.

I will begin with the success of using the Philosophy for Children program in getting hearing impaired children to think critically and the problem of getting them to think and reason logically. Teaching hearing impaired students to reason logically is very difficult since it ties the linguistics system to the thought processes. The students used <u>Harry</u> for one year, the following year the same students took <u>Harry</u>, but this time from the point of view of inquiry, emphasizing logical reasoning. The students needed to be able to understand and categorize all of the sentence structures and what NP (subjects and objects) and VP (predicates) were before they could deal with quantifiers (each, generally, all but one, almost never, etc.), and certainly before they could deal with syllogistic logic and hypothetical syllogisms. As Lipman states: "Infants begin to explore, deliberate, infer and inquire well before the acquisition of language. As verbal behavior emerges, it is both grammatical and logical: children acquire the "rules" of logic and grammar along with words and their meanings." 1

How does one go about teaching logic to hearing impaired children? It would seem rather an easy task to teach the categorizations of statements beginning with all, no and the in between gray area of some. It would also seem that all one would have to do is present sentences with those quantifiers to children and they would easily begin the task of formal operations since we really would be dealing with very basic simple sentences of our language. For example: A few/ Almost no/ All/ Most/ northerners were slave owners. How wrong my presumptions were. Talk about jumping to conclusions and forming invalid conclusions! Beginning the simple formal operations was a nightmare. Just how many sentences do you know in literature or reading material that begin in a clear cut way, using all, or some. Not that many. These quantifiers are defined by a paradigm of vocabulary which is heavily embedded in semantic overtones. This means that the student should be competent in saying or writing language with good structures and have an understanding of the varying semantical functioning and phrasing of words within a sentence. In order to comprehend, analyze and use syllogisms one must first understand the basics of standardization clearly in order to see that some conclusions could be false, contradictory or invalid. All of this is necessary in order for students to make clear decisions and value judgments. "Having knowledge of a given discipline is not the same as knowing how to think critically."²

After having taught <u>Harry</u> to the hearing impaired and deaf students it always bothered me that they never seemed really confident about standardizations and that the syllogisms were just a mere set of two sentences in which one crossed out the middle terms and came up with a third sentence, perhaps: a conclusion, regardless of what that sentence said semantically, and regardless of the fact that it might be contradictory or illogical after reading the first two premises. The students were unable to make inferences and draw conclusions from information presented in literature, and social studies as well as in simple discussions. Banil



Picture provided by Maura J. Geisser.

THE RELATIONSHIP OF PHILOSOPHY AND LOGIC TO LANGUAGE STRUCTURE

Although the same student's abilities to inquire, to discuss, to agree or disagree, to give reasons, to think reflectively, and to make inferences from information was increasing and developing in a more critical and creative way, still there seemed to be the failure in their ability to comprehend the logical process of standardization. This loomed over me. How could we change this? What could be done was to look at the linguistics or grammar of the sentences as well as the semantics or conceptual relationships of the English language. By grammar, I mean a set of rules that will generate all expressions allowable in the language.

Before the students could deal with the quantifiers, they had to be able to categorize the different kinds of sentences, and the kinds of structures that make up the sentences. This categorization and organization of things into related groups must be represented clearly and consistently.

Bruner explicates that there are: Three universal properties of base-structure grammar, properties as characteristic of the child's grammar as of the adult's [which are] subject-predicate relations, verb-object relations, and modification. Each of these presupposes an underlying logical form that can be simply stated. 3

In logical terms then, the subject is a function of the predicate. Logical standardization is based on the form: Quantifier, noun, linking verb [are], and noun. This in our curriculum was called Pattern 4.

The five basic linguistic patterns, the structure of simple sentences, used in our curriculum are:

Pattern #1: NP V (adverb) Pattern #2: NP V NP Pattern #3: NP LV Adj. Pattern #4: NP LV NP Pattern #5: NP LV Adv. 4

Thus language provides the building blocks that make arguments possible, and this demands some comments on those aspects of it which are crucial to the construction and evaluation of ordinary language arguments. Here clarity, precision, the rejection of misleading euphemisms and the unambiguous use of language are prerequisites for good argument, and they require the elimination of questionable classifications, vagueness and equivocation. Such concerns are not discussed in formal logic, given that it introduces formal semantics which exclude the possibility of vagueness or ambiguity. In constructing propositional logic representations of ordinary arguments, for example, the requirement that one assigns particular atomic sentences to specifically defined ordinary language sentences is the formal equivalent of our injunction against vagueness and equivocation. ⁵

This seemed to be the place to start. If the students could categorize different sentences according to their grammatical structure, in linguistic terms, then they could deal with the variety of vocabulary which make up the different elements of the sentence, and whose functions changed because of the semantical content. Language usage presupposes that there are specific cognitive processes which are necessary for its use. To be competent in language usage the individual must use both analysis in determining how a word or phrase functions and understand the meaning of the sentence by synthesis of all parts. Using <u>Harry</u> but also using pieces of literature, such as, <u>The Blind Men and the Elephant</u>, the stories were read. Then students were asked to give interesting ideas which were written down and discussed. The students first stated there was a problem in the story. Sentences were given such as:

- 1. The trunk was not a snake.
- 2. The ear was not a fan.
- 3. The tail was not a rope.

The students were asked to look carefully and to see if there were any similarities in these sentences. When they agreed there were similarities, we put the sentences on a chart and hung it on the wall. Sentence charts are often used in deaf education to help the students visualize language for analyzation. We hung up a chart for every sentence that did not fit into the patterns we had established. Later we analyzed these sentences and consolidated them into fewer charts with similar structures. The students did not seem to be able to determine the difference between nouns and adjectives. So time was spent labeling the functions of these words in a sentence. This was crucial! If a child is supposed to be able to standardize sentences in the form NP V NP, and if the word after the noun is not a noun but rather an adjective or adverb, then the student must realize this and have the ability to put this word into a relative clause with a noun. The noun would have to be supplied as well. This involves critical analysis as well as application of knowledge of simple, complex, and transformational grammar on the students part. Since the students could not determine whether a word was a noun or not, the acquisition of, and use of new vocabulary with the building of paradigms of nouns developed. Bruner stated: "The conventional superordinate category emerges governed by logical rules of inclusion, exclusion, and overlap." ⁶ Oleron showed that for the deaf this "idea of

common class is hardly ever expressed in abstract form." 7

Again sentences from stories, from <u>Harry</u> and every day classroom dialogue were critically looked at and put on charts where they were similar. The students discovered that pronouns substituted for nouns. One student being very proud, said, "Today [adj.] is [V] gym [N]." This analysis is not totally correct but a step in the right direction. Next the students needed to notice when a word functioning as a N was absent after the verb. This was to signal the need for a N and putting the adj. or adv. into a relative clause. The slaves are strong. This sentence became: the slaves are people who are strong; or, the slaves are strong people. Other stories like <u>Amy's Goose</u>, <u>The Red Rose</u>, <u>The Giving Tree</u>, <u>The Hill and the Rock</u>, and <u>The Stonecutter</u> were taken as the students were developing the concepts of searching for the problem, inquiring if a problem exists, how the problem was created (causes and effects) and how the solution was arrived at.

Once the students were comfortable doing this, then the students could look at a sentence and try to categorize it by quantifier and then standardize it and state what it meant. The quantifiers all and some were the easier. The quantifiers no or some are not, and only were extremely difficult for the hearing impaired. (Dealing with the quantifiers, all, some and no are closely related to the concept of part/whole and fractions.) If a student doesn't clearly understand that if there is one example no matter how small or unimportant which is different or one exception to the statement, therefore he/she can't use all, the student can only use some. Only then will one be able to see that the statement is not representative of all. Concrete experiences represented as Venn diagrams were extremely helpful in representing these sentences.

When we say no, we mean there is not one example (nothing, none) of something. This is a very difficult concept for the hearing impaired students to grasp. It seems to be caused by the more abstract semantical connotations.

The deaf students were able to take an original sentence and transform it into a standardized sentence. Once this was done, reversal of sentences was easy. A small level of difficulty in designating the truth and falsity of the original sentence and its reverse was based on the semantics of the sentence. The students had to decide if they thought sentences were true. Many times when sentences were assumed to be true they would say it was false, because of their opinions, or lack of knowledge, or uncertainty especially if the language was more abstract.

The idea of a contradictory statement was accepted as "oh no, here we go again," and the students tried to memorize the order, like some of us did for musical scales, Every <u>Good Boy Deserves Fudge</u>. One student stated that the original sentences and contradictory sentences were written in an upside down way (inverted order). "All courses are interesting ...," ⁸ you just had to remember the correct order. But what did it mean to make a contradictory statement? What does that matter as long as you identify the sentence and can make up the contradiction in rote form. Often in a discussion contradictions would be stated. The students, not realizing what they had said, would completely dismiss it and continue on. We would stop class and analyze what was said in order to determine which view the person believed or supported, and show why both views were contradictory.

If each sentence had two possibilities, then two sentences, each with two possibilities would result in four possibilities. Going through the possibilities and seeing which were possible and which would be contradictory was difficult and painful.

Tony's possiblilities

- 1. The world had a beginning and was created by God.
- 2. The world had a beginning but was not created by God.
- 3. The world didn't have a beginning and was created by God.
- 4. The world didn't have a beginning and wasn't created by God. 9

Number 3 is a contradiction, 1, 2, and 4 are possible. If you can't list off (think of what might happen) all the possibilities that can be created from sets of information, then one can't obviously tell which are illogical or contradictory and therefore won't work. We use this process everyday in our thinking and dialogical exchanges with people. It is based on the crucial ability to know, comprehend, and to be conscious in our application of our language. Logic prevents us from making jumps from premises to conclusions.

Beliefs get in the way of stating possibilities while creating stereotypes, and prejudices. This means you must be able to deal in abstractness and prediction and not a concrete level of what I see, feel, hear, or taste. Oleron observed,

that the mental processes of the deaf are characterized by an especial concern for observed data, which data guide them in accomplishing the tasks set before them. This attitude becomes an obstacle when they are confronted with tests demanding a certain level of abstract thinking. ¹⁰

Is something possible because you know or see it? My students would invariably say yes in all situations in which the limitations of the senses would make the sentences not possible. Is something possible if you can't see it? Of course it is not possible. My students felt that you don't know since you can't see it, so it can't be possible or can't exist. Or do you know it and see it because it is possible?

LOGICAL RELATIONSHIPS AND VENN DIAGRAMS

In order to have the hearing impaired students deal with relationships more clearly, Venn diagrams were found to be enormously helpful. The students could iconicly represent what had first been concretely worked out. Then students could discuss the relationships of part/whole, or overlapping and thus attempt to write sentences to represent the diagrams. Since there are three kinds of "turn about" relationships dealing with differences of kind and degree taken in <u>Harry</u> in Chapter 7 and later "carry over" relationships when two sentences are combined, some combinations containing a relationship are true, some will be false and others will be indeterminate. The concept of stated relationships posed a difficulty for my students.

Summer is warmer that spring. Summer is warmer than winter. Therefore, Summer is warmer than winter. 11

The students observed that certain words were the same in all three sentences. It was very easy to cross out the middle term but then the students had absolutely no idea of the relationships involved or how to draw a conclusion. Iconically we represented it as:

NP	LV	relationship	NP	LV	relationship	NP
Summer	is	<u>warmer than</u>	Spring	is	warmer than	Winter.

Students were asked to analyze the sentences and then to label the NP, LV, and relationship. Next they were asked if the relationship was the same since it might not be (big, small, warm, cold) which would entail rewriting the sentence until the relationship was the same.



These are the two given relationships and now they needed to find a third

relationship, a new sentence using the same relationship.



Thus the third sentence (or conclusion) would be: Summer is warmer than winter.

Then the students could decide if the conclusion was true or false.

If there are two relationships and the relationships are different so you can't draw a conclusion this way. Thus:

The USA is larger than Mexico.



The USA is smaller than the USSR.



The students observed that the relationships were different in the two sentences, and that three countries were involved. The students set up these sentences, analyzed, labeled them and changed the second relationship. To change the relationship involved using Venn Diagrams.

NP	LV	relationship	NP
The USA	is	larger than	Mexico.
NP	LV	relationship	NP
The USSR	is	larger than	USA
		-	
The USSR	is large	er than the USA	is larger than Mexico.
\sim		_1/	\2/
		\3	/

Thus the conclusion would be: The USSR is larger than Mexico, and could be represented as:



It was and is necessary for the students to observe the whole picture, i.e. a piece within another larger piece of the given whole.



Then the students wrote out the sentences, this time using the other relationship and figured out the conclusion.

1. Mexico is smaller than the USA.

2. The USA is smaller than the USSR.

Again they set up their relationships.



The conclusion being: Mexico is smaller than the USSR. The children needed to see that by either saying, <u>Mexico is smaller than the USSR</u>, or, the <u>USSR is larger than</u> <u>Mexico</u> means the same thing. This is where the problem of semantics arises again because the hearing impaired students will say that these are two different sentences and can not mean the same thing, whether or not you use concrete experiences or Venn Diagrams. Factual information, measurements of size and distance as well as statistics were hooked up as a means of verification for students who still did not understand or did not believe it was possible.

The students liked diagramming these relationships and had fun playing with different pairs of sentences. They wanted to draw conclusions and to try to diagram them. This process helped the students better comprehend the kinds of relationships that were possible.

If educational experience, like all experience, is indeed a process and a transaction, then it is in some sense active, and the experiencing organism is not a passive receiver, but a dynamic participant in a

moving, developing situation, 12

The following is an example that one student came up with: Spain is larger than Portugal. Portugal is smaller than China.

Spain Portugal China ____is bigger than__/ ___is smaller than__/ ____is bigger than___/

They had to change one relationship so the two premises could have the same relationship and the conclusion drawn.

Spain is bigger than Portugal.

China is bigger than Portugal.

So, Spain and China are bigger than Portugal. This the students noted was a different kind of relationship.



Indeterminate relationships had to be concretely acted out to show that these kinds of carry over relationships involving feelings, space or time, could present problems that may or may not be true in the conclusion even if the two premises were true.

The unit on Whales in <u>People and Technology</u> lent itself to many carry over relationships, conditionals and syllogisms. Here are some of the students' attempts:

- 1. If people don't want to die, they want to be alive.
- 2. If I kill many people or animals, then there wold be not people or animals left.
- Don't kill people and things that are alive. <u>Being alive is important</u>. Conclusion: People don't want to die, they want to be alive.
- If animals learn, they have a mind. <u>The brain is the same as the mind.</u> Conclusion: If the mind invents tools then animals learn and can invent tools.
- 5. All countries have presidents. <u>All presidents have governments</u>. Conclusions: Some countries have governments.

All countries have governments.

Interestingly, tow different students came up with the above conclusions and they argued vehemently for the conclusion they had drawn. The students were asked to setup

the relationships and draw a conclusion, which they did. They even drew conclusions. Finally the class decided that all countries had governments was the correct conclusion.

All countries have governments.



Here the students were making an attempt to construct a logical syllogism and draw a conclusion while trying to use generalizations. Inferring generalizations by which they meant that all groups are similar, is an important part of inductive reasoning.

The students were asked to go back over the given statements (premises) to determine the truth and falsity of them and then to see if the premises made sense and had any connections.

Thus as in <u>Harry</u>, we had an ongoing process of inquiry. It is my basic supposition that this philosophical skill of inquiry must necessarily include the linguistic skills of sentence structure, reversals and syllogistic sentences as well as the cognition or semantics of language prior to philosophical relationships dialectically. "Concepts are basic to such mental operations as judgment and reasoning; and on the other hand, they depend for their formation on other operations such as abstraction." ¹³ The nature of the concept of noun phrases is caught up in the definition and function of the determiner and quantifier. This is extremely crucial.

The NP is critical in philosophical issues as clear philosophical reasoning is essentially a matter of semantic consistency. In Syllogisms the critical factor is the quantifier in the NP. ¹⁴

Thus there must be the cognitive act plus the language system. Oleron observed that "progress in the use of language and of abstract terms should contribute to the development of conceptual thinking." ¹⁵ If the language base is inadequate or deficient as in the approximate two year language delay of the hearing impaired, then these children can't handle or can't comprehend or accomodate the totally abstract. These abstract concepts depend on their explanation or presence in the form of print. Thus the hearing impaired child who can't use the print totally, can't deal with these formal abstract concepts unless they have prior language work.

INTEGRATION OF PHILOSOPHY IN THE CURRICULUM

An ounce of experience is better than a ton of theory simply because it is only in experience that any theory has vital and verifiable significance. An experience, a very humble experience, is capable of generating and carrying any amount of theory (or intellectual content), but a theory apart from experience can not be definitely grasped even as a theory. It tends to becomes a mere verbal formular, a set of catchwords used to render thinking, or genuine theorizing unnecessary and impossible. Because of our education we use words thinking they are ideas, to dispose of questions, the disposal being in relaity simply such an obscuring of perception as prevents us from seeing any longer the difficulty. ¹⁶

The second and most important issue I would like to address is that of integrating the Philosophy for Children program into a unit approach curriculum for the deaf. I believe that hearing impaired students can think reflectively and critically, reason logically and discover inconsistencies in their own thinking as well as others if they are exposed to this kind of thinking, and if they are taught socratically.

Philosophy, even in an exciting, evolving program such as we have at the Rhode Island School for the Deaf is not without resistance and misunderstanding from both parents and faculty. "Why is my child asking so many questions?" "Why are you teaching what I'm teaching?" "If you teach the same book or subject, you'll give the answer away." "I want to know exactly what you will be teaching and how and what you will be saying to the students." Examples are not good enough. Heaven forbid that students might take the same book or concepts in two different classes or worse than that, in two different ways.

When students are presented with information this does not mean they have comprehended it and made it part of themselves. So it does not seem that it would hurt the student to use the same information in different activities from different points of view (or perspectives). The whole purpose of education seems to have been in that tradition of rote memorization of facts by students in classes where they have been lectured to. Facts which are largely unrelated, and seemingly meaningless to the student and his real life. Indeed, this is the mode of learning from which most teachers have come. Why not look at the concepts and underlying causes and reasons? Statistics have proven that the factual information in our world is expanding at a tremendous rate. How can any one student remember and apply all this information, never mind having the time to sort through this mass of information and find what is crucial to her/his life, and to digest it, then to apply it.

One day students came into my Philosophy class from Social Studies, where they had been learning facts about the South and cotton and the effects it had on pre-Civil War America. None of the students had ever seen a cotton plant. We went outside on that cold fall day, searching for cotton fibers. We found seeds, berries, dead plants and milkweed pods, but no cotton. After examining the milkweed pods in answer to the question, "What for?", the students said the milkweed was like cotton; it had seeds and fibers inside a pod which popped open in the heat. Analysis of the information and concrete collected samples from the "field trip" yielded a discussion on the differences and similarities between the milkweed fiber, found in the yard, and the cotton fiber, studied in Social Studies class. The class took facts and tried to discover why cotton could not grow in Rhode Island. Back in class some of the students said it was too cold to grow cotton, but some still insisted that cotton could plant in June, July, August, September and October and came up with approximately 122 days, not 200 days, a fact learned in Social Studies. They discovered the reason to be climate and time for maturation: therefore, Cotton can not grow in Rhode Island. But it was not until they actually saw a cotton plant and cotton seeds that they truly understood the comparisons. In some ways the two plants were the same abut in other ways very different.

The teachers meeting the next day lead to a discussion of teacher perspectives on what had been taught, time on task, and the "meaningless repetition of material" in Philosophy class. Our School is participating in Brown University's essential School Program and so it seemed to me that what Ted Sizer means by "less is more" ¹⁷ is indeed what Philosophy for Children is all about. Are we to do more reflective understanding with fewer facts and finding the underlying causes and reasons and thus teach the concepts more thoroughly, or are we to teach more facts with less understanding and less ability to infer and to think of alternate possibilities?

"Why might that plane have crashed?" Can this question be linked to the American Revolution, to slavery and to the bombings in Atlanta in the 1960's?

Revenge, terrorism, prejudice--these are not just facts but very abstract concepts. Does this mean the deaf can't understand these abstract operations because they aren't capable yet of doing formal operations. Therefore, we can't expect them make inferences and to draw conclusions from the information and concepts presented-especially since we as adults can't. I think not-unless the students try to use some of the skills they have learned, they will never be able to discover and observe new perspectives or find that they don't have the solution and need to look for new or better alternatives. They need to discover why things don't work and work on creating and redefining their definitions.

A teacher said, "I felt only you [the Philosophy teacher] could ask 'why questions' and I could never ask them. Then I realized you can't teach history without asking 'why questions." It is not just asking "Why?" Can the children ask these questions themselves? Can they infer from the information the causes, effects, reasons, consistencies, inconsistencies, the point of view or possibilities of why? The students need to experience all the concepts, information, and skills on the tree Brunerian levels of inactive, iconic and symbolic and then they should be asked to exhibit mastery of them. Mastery can be shown by the process of creating a mock government; an election, or by role playing how prejudices or biases end in alienation and a loss of rights. Bruner claims, "Any subject can be taught effectively in some intellectually honest form to any child at any stage of development." ¹⁸ I endorse his sentiments completely. Even the slowest child can benefit from looking at things carefully, critically and in a philosophical way discussing these ideas.

EVOLUTION OF PHILOSOPHY FOR CHILDREN AT THE R. I. SCHOOL FOR THE DEAF

My use of Matt Lipman's Philosophy for Children Program has evolved over the past nine years at the Rhode Island School for the Deaf. It began as an attempt to bridge the gap that deaf students had between their verbal and written work to enable them to think more reflectively and critically. We began teaching the Program with Seniors in High School. The rigid thought processes and opinions of the seniors caused us to drop the program back to juniors and sophomores in the hope of increasing the student's flexibility in dealing with ambiguity, and in question formation. We found that the younger the children were, the more open to alternate possibilities and the more tolerant they were of other's beliefs. <u>Harry</u> was taught to Juniors, and <u>Pixie</u> was brought sown to the Middle School. Eventually we used Kio and Gus with nine year old deaf students! The classroom discussions and inquiry at this age were fantastic for young hearing impaired children. It was thrilling. I experimented with <u>Kio and Gus</u> by reading part of the text to these children and had them read parts of the text. But, we had problems with the exercises because some of the language structures or directions were too difficult for the children to really comprehend. The form got in the way of the ability to communicate the children's thoughts and ideas. A new problem presented itself when parents, who had the program explained to them at the beginning of the year, could not understand the concepts being covered. The assumption was made that the children must not like the program and the concepts and skills being taught must be too difficult because some parents could not understand it. The fact was the children loved it yet were unable to convey this to their parents. I still believe it should be done with younger deaf children, but with more tangible activities and less written work.

At this point, Philosophy is focused in the Upper School with children 9 to 14 years of age. We have seen the tremendous growth in the students' abilities to observe, think things through, ask questions or infer information, but most of all the fun, seriousness and depth of dialogue, and the wide range of concepts that the discussions can have. The students are curious to think up possibilities and examples as well as trying to find out why some of their hypotheses or syllogisms won't work. Sometimes this growth in learning to think more critically and creatively is accompanied with frustration. It can be painful and exasperating to both teacher and student to have to listen to another's point of view when you have an important idea to state. To digest what has been experienced and then to possibly change one's beliefs or views is a very slow process which must entail consistency and a continually spiraling exposure. This is exciting but also challenging. "No one of any age likes his word rejected, his motive questioned, or his solutions proved inaccurate." ¹⁹ People really do not like to be challenged.

Being challenged means possibly and more than likely feeling threatened. Students learn to accept and deal with criticism by explaining their ideas more carefully, by giving better reasons and asking questions. Through this process the hearing impaired students are able to improve their ability to understand thereby learning.

The teachers at our school, for the most part, are very creative, competent, and go out of their way to present their materials to the children in a rich, and exciting way. Unfortunately, few of us have had good socratic teachers in our own experience. So most teachers are very hesitant to come out of Plato's cave and see the light of critical, rational, reflective thinking because of our enslavement to a multiple choice, right or wrong mentality. Our role as teacher has to be one of a questioner, of a coach, encouraging as well as provoking students to see important ideas in their depth and complexity rather than portraying our world in simple unrealistic terms. As a participant and leader we must try not to appear as an infallible demigod, knowing all answers.

Understanding is more stimulated than learned. It grows by questioning oneself or form being questioned by others, such as teachers. Questioning is a far more difficult form of pedagogy for teachers than are coaching and telling because it is the least predictable. ²⁰

The Philosophy for Children was a threat to other faculty. This program did not lecture so how could the students possibly learn. You never knew what to expect in the discussion or what new perspectives might be raised by children. Faculty were encouraged to observe and participate in the "Philosophy class." It was an exciting, different way to teach. But when faculty members were asked to do something that they had not experienced in their own education, they felt personally threatened.

This school year, as we try to integrate the concepts, skills and goals of the Philosophy for Children Program into the core of the curriculum, it seems that the program in its original "package" was less of a threat than our current integration of philosophy into our units. Our curriculum K-12, is broken into units in which all subjects are taught and integrated around central conceptual statements. If one's unit is the civil war then literature class deals with biographies of famous people during that period, as well as folk tales and stories from first, second and third person points of view. In discussing slavery as an issue leading up to the Civil War, the students spent time categorizing, comparing and contrasting people and things in order to determine what each meant. Next the students discussed what it meant to treat something as a thing or a someone as a person, or someone as a thing. The concepts of respect, ownership, use and prejudice arose. The students attempted to make sense of all their ideas in this conversation. They began with definitions.

Danny: Things are my property.
Jody: Things belong to me. So things are my property means I own them.
Danny: You own things not people.
Joe: Things don't feel anything.
Jody: My parents own me, I own myself.
Joe: You can do anything with it if you own it. It is your property.
Danny: I am my parent's child.
Jody: Parents own the child. Can help.
Danny: Police not satisfied if you hit or abuse a child.
Dawn: What about a dog or cow? You own them but they are

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things. But dogs are cows feels air; someone kicking them, scratching and pain hurt. They have feelings like sad, happy, lonely, angry, growl.

The class agreed on Dawn's idea, and also that people should not treat other people as things; but rather with respect. Their thinking about the concept of the more abstract aspects of ownership was still obviously unclear but by identifying with the victim, the student took a step toward being better able to comprehend another's perspective.

In utilizing a unit approach, almost all the language work is taken from stories or factual historic information. Math might involve graphs dealing with the government's economics previous to the Civil War or population. Art and Drafting may involve the creation of a large map of the United States, painted on the asphalt in the playground. Thus attempts are made to integrate all subjects to relate information and concepts. No matter what the discipline, students should approach it with curiosity and a sense of wonder.

In order to teach Philosophy within the unit, one can't use the novels explicitly since the topic information is often not integrally nor experientially related to the concepts of the unit; the unit; the population of students, or the linguistic ability of the students. Another good reason for the change was that my principal felt there was gold mine of excellent children's literature such as <u>The Little Prince</u> which should be used to elicit and substantiate Philsophical concepts. He felt this would be a much better way to incorporate these concepts within other disciplines. Then instead of one teacher teaching their units philosophical and reflectively. But this is an incredible threat to an excellent faculty. To have to change the way they teach, not to lecture and to allow students to ask questions. But as with children, adults tend to learn things better if they have first been exposed and then have experienced something themselves. "One learns complex thinking by practice." ²¹

Having an example present in the school system is a good model but it creates difficulty in convincing others to change without confrontation or defensive behavior.

Encouragement of the intellectual interest (that of solving a problem through inquiry), must be one of the prime purposes of genuine education, since the experience of the individual is thereby enriched and freed. ²²

CONCLUSION

I found that by stressing the basic linquistic structure grammatically, hearing impaired students were able to categorize sentences by similarities. Through analysis the students gained the ability to determine how words are phrased, how they function and what some of the sematic relationships entailed. The students then made great progress in creating reversals, and standardizing sentences. Because they now could determine which words were nouns or quantifers, the students were able to build paradgms of vocabulary for each category. The use of Venn Diagrams helped the students to successfully clarify relationships and represent them in an understandable and fun way.

The progress was slower in drawing conclusions from information taken from other subjects and stories. If the information was organized and structured for the students and the inferences made, then they could go through the process of drawing conclusions more easily. It still was extremely difficult for them to draw inferences and conclusions if no structure was presented. The students had gone through the process of exposure, and were beginning the level of recognition which necessarily comes prior to representation.

The student's ability to look at information and concepts from different perspectives increased. The need had arisen for students to use the skills they had learned and to apply them to their daily interactions. The current direction at the Rhode Island School for the Deaf has shifted its focus from the Philosophy for Children program being taught as an entity unto itself, to embedding it within the curriculum. We have for many years sought to integrate various disciplines and programs into our curriculum. This evolving, conceptually-integrated curriculum has had a profound impact on deaf children and on deaf education and has brought renown to our school around the world.

I firmly believe that all subjects can and should be taught: reflectively and philosophically, through a socratic approach. It is through the search and discovery of meaning in a simple fiber like cotton, that can begin a cognitive revolution and see that philosophical concepts are what really hold together the fabric of curricular.

Maura J. Geisser

ENDNOTES

^TLipman, p. 5 ² Hayward, p. 368 ³ Bruner et al., p. 42-43 ⁴ Blackwell, et al., p. 69-73 ⁵ Groahke, p. 303-304 6 Bruner, p.54 ⁷ Oleron, p. 47 ⁸ Harry, p. 59 ⁹ Ibid, 67 ¹⁰ Oleron, p. 47-48 11 Lipman, Phil. Inquiry, p. 207 12 Geiger, p. 195 13 Oleron, p. 43 ¹⁴ Blackwell, 1988 15 Oleron, p. 48 16 Dewey, p. 169 ¹⁷ Sizer, p. 109 18 Bruner, p. 33 ¹⁹ Sizer, p. 113 ²⁰ Ibid, p. 117 21 Ibid, p. 103 ²² Geiger, p. 198

REFERENCE

Blackwell, Engen, Fischgrund, & Zarcodoolas. (1978). <u>Sentences and Other Systems</u>, <u>A Language Curriculum for Hearing Impaired</u>. A.G. Bell.

Blackwell, P. (1988). Rhode Island school for the deaf language goals. Unpublished paper.

Bruner, J. et al. (1966). Studies in Cognitive Growth. New York: John Wiley & Sons.

Bruner, J. (1977). The process of Education. Cambridge, MA: Harvard University.

Cowley, J. (1983). The Red Rose. New Zealand: Shortland.

de St. Exupery, A. (1982). <u>The little prince</u> (Trans. K. Woods). New York: Harcourt Brace Jovanovich.

Dewey, J. (1916). Experience and thinking. <u>Democracy and Education</u>. New York: Macmillan.

Geiger, G. R. (1958). John Dewey in Perspective. New York: Oxford University.

Geisser, M. J. (1985). Philosophy: A key to the deaf mind. <u>Thinking, The Journal of</u> <u>Philosophy for Children</u>, <u>6</u>(2), 36.

Groahke, L., & Tindal, C. (1986). Critical thinking: How to teach good reasoning. <u>Teaching Philosophy</u>, 10(4), 301-318.

Hayward, A. (1987, December). [Review of <u>Teaching students to think critically</u>: <u>A guide</u> for faculty in all disciplines]. p. 367-368.

Holmes, E. T. (1977). <u>Amy's goose</u>. New York: Harper & Row.

Jackendoff, R. (1986). Semantics and cognition. MIT.

Lipman, M., Sharp, A. M., & Oscanyan, F. (1980). <u>Philosophy in the classroom</u> (2nd ed.). Philadelphia, PA: Temple University.

Lipman, M. (1982). <u>Harry Stottlemeier's discovery</u>. Montclair, NJ: First Mountain Foundation.

Lipman, M. (1984). <u>Philosophical inquiry</u> (2nd ed.). Montclair, NJ: First Mountain Foundation.

Mayer, M. (1968). If I had. Dial.

McDermott, G. (1975). The stonecutter. Viking.

McKee, D. (1986). The hill and the rock. New York: Puffin.

Oleron, P. (1972). Conceptual thinking of the deaf. In P. Adams (Ed.), <u>Language in</u> thinking (p. 43-49). Penguin Education.

Quigley, L. (1981). The blind men and the elephant. Charles Scribner's Sons.

Scheffler, I. (1973). Reason and teaching. London: Routledge & Kegan Paul.

Silverstein, S. (1964). The giving tree. New York: Harper & Row.

Sizer, T. R. (1985). <u>Horace's compromise: The dilemma of the american high school</u>. Boston: Houghton Mifflin.

Tanz, C. (1978). An egg is to sit on. New York: Lothrop, Lee & Shepard.

Williams, M. (1983). The velveteen rabbit. New York: Holt, Rinehart & Wilson.





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