Described in this paper are the author's experiences with a technique for providing preservice social studies teachers with first hand experience with the discovery approach to teaching. This is defined as a structured learning activity in which the learner is encouraged to learn for himself that which is to be learned or discovered. The discovery learning process was both the technique of his lesson and the object for discovery. The 26 students in the methods course were presented with an unidentified fable and given the task of identifying as much about it as possible. The report includes a transcript of much of the class interaction and the author's interpretations. A final section discusses student reaction to the lesson and to their additional task of designing and teaching an original social studies discovery lesson in a local public school. Student attitudes toward discovery teaching were mostly negative after the author's lesson and did not change after their own teaching experience. The author notes, however, that many of those students who disapproved of discovery asked for the author's lesson for use in their own student teaching during the following semester.

(Author/DJB)
AN ENCOUNTER WITH DISCOVERY: PERFORMANCE AND REACTIONS OF PROSPECTIVE SOCIAL STUDIES TEACHERS

American Historical Association

History Education Project

The State University of New York

Stony Brook, New York

Copyright © 1971 by Eli Seifman
I. DISCOVERY AND THE SOCIAL STUDIES

Discovery Defined

The so-called "discovery approach" has received considerable attention from curriculum revisionists in a number of subject fields, most notably science and mathematics but in other disciplines as well—not the least of which has been the social studies. Indeed, there is now a substantial literature focusing on the "discovery approach" and the teaching of the social studies.¹

As a "teaching-learning strategy," the discovery approach has been variously described and defined by different writers. Interestingly, neither the proponents nor opponents of the "discovery method" or "discovery approach" are in complete agreement upon a definition of the term. Briefly and simply stated (simply in the sense that while the definition is an operational one, it does lack a certain precision), the so-called discovery approach is one in which the teaching-learning activity is so structured that the learner is encouraged to learn for himself that which is to be learned or discovered.²

Teacher Attitudes Toward the Discovery Approach

Among teachers, the discovery approach evokes strong reactions—ranging from (proponents): "It's the only way to teach because it makes the learner a participant rather than a spectator in the learning process," to; (opponents): "It's not teaching at all because all the teacher does is start something and then he does nothing after that; it's nothing but a big waste of everybody's time."

Much of this reaction to the discovery approach is based upon indirect rather than direct or first-hand experience with the method. Indirect
experience is often the result of discussing other colleagues' experiences and reactions to the discovery method, observing someone else teach in the discovery mode, or reading an account of another's efforts to teach in this style. Direct or first-hand experience is the result of actually designing and implementing a "discovery lesson," or actually participating in the "discovery" as one of the learners.

II. ENCOUNTER WITH DISCOVERY

Plan of Encounter Strategy

For teacher preparation candidates and neophyte teachers, the likelihood is even greater that their introduction to the discovery method will be of the indirect type. The author was interested in providing prospective teachers with a direct experience with the discovery method and studying their reactions based upon this first-hand experience. Thus a class of twenty-six students, all members of an undergraduate "social studies methods" course at the State University of New York at Stony Brook, served both as subject and object—participating in the teaching-learning situation itself, and the analysis of their own performance and their reaction to the entire experience.

For the encounter with the discovery approach the instructor selected the following "document":

... ONCE UPON a time an elephant made a friendship with a man. One day a heavy thunderstorm broke out, the elephant went to his friend, who had a little hut at the edge of the forest, and said to him: "My dear good man, will you please let me put my trunk inside your hut to keep it out of this torrential rain?" The man, seeing what situation his friend was in, replied: "My dear good elephant, my hut is very small, but there is room for your trunk and myself. Please put your trunk in gently." The elephant thanked his friend, saying: "You have done me a good deed and one day I shall return your kindness." But what followed? As soon as the elephant put his trunk inside the hut, slowly he pushed
his head inside, and finally flung the man out in the rain, and then lay down comfortably inside his friend's hut, saying: "My dear good friend, your skin is harder than mine, and as there is not enough room for both of us, you can afford to remain in the rain while I am protecting my delicate skin from the hailstorm."

The man, seeing what his friend had done to him, started to grumble, the animals in the nearby forest heard the noise and came to see what was the matter. All stood around listening to the heated argument between the man and his friend the elephant. In this turmoil the lion came along roaring, and said in a loud voice: "Don't you all know that I am the King of the Jungle! How dare anyone disturb the peace of my kingdom?" On hearing this the elephant, who was one of the high ministers in the jungle kingdom, replied in a soothing voice, and said: "My Lord, there is no disturbance of the peace in your kingdom. I have only been having a little discussion with my friend here as to the possession of this little hut which your lordship sees me occupying." The lion, who wanted to have "peace and tranquillity" in his kingdom, replied in a noble voice, saying: "I command my ministers to appoint a Commission of Enquiry to go thoroughly into this matter and report accordingly." He then turned to the man and said: "You have done well by establishing friendship with my people, especially with the elephant who is one of my honourable ministers of state. Do not grumble any more, your hut is not lost to you. Wait until the sitting of my Imperial Commission, and there you will be given plenty of opportunity to state your case. I am sure that you will be pleased with the findings of the Commission." The man was very pleased by these sweet words from the King of the Jungle, and innocently waited for his opportunity, in the belief, that naturally the hut would be returned to him.

The elephant, obeying the command of his master, got busy with other ministers to appoint the Commission of Enquiry. The following elders of the jungle were appointed to sit in the Commission: (1) Mr. Rhinoceros; (2) Mr. Buffalo; (3) Mr. Alligator; (4) The Rt. Hon. Mr. Fox to act as chairman; and (5) Mr. Leopard to act as Secretary to the Commission. On seeing the personnel, the man protested and asked if it was not necessary to include in this Commission a member from his side. But he was told that it was impossible, since no one from his side was well enough educated to understand the intricacy of jungle law. Further, that there was nothing to fear, for the members of the Commission were all men of repute for their impartiality in justice, and as they were gentlemen chosen by God to look after the interest of races less adequately endowed with teeth and claws, he might rest assured that they would investigate the matter with the greatest care and report impartially.
The Commission sat to take the evidence. The Rt. Hon. Mr. Elephant was first called. He came along with a superior air, brushing his tusks with a sapling which Mrs. Elephant had provided, and in an authoritative voice said: "Gentlemen of the Jungle, there is no need for me to waste your valuable time in relating a story which I am sure you all know. I have always regarded it as my duty to protect the interests of my friends, and this appears to have caused the misunderstanding between myself and my friend here. He invited me to save his hut from being blown away by a hurricane. As the hurricane had gained access owing to the uncrowded space in the hut, I considered it necessary, in my friend's own interests, to turn the undeveloped space to a more economic use by sitting in it myself; a duty which any of you would undoubtedly have performed with equal readiness in similar circumstances."

After hearing the Rt. Hon. Mr. Elephant's conclusive evidence, the Commission called Mr. Hyena and other elders of the jungle, who all supported what Mr. Elephant had said. They then called the man, who began to give his own account of the dispute. But the Commission cut him short, saying: "My good man, please confine yourself to relevant issues. We have already heard the circumstances from various unbiased sources; all we wish you to tell us is whether the undeveloped space in your hut was occupied by anyone else before Mr. Elephant assumed his position?" The man began to say: "No, but—" But at this point the Commission declared that they had heard sufficient evidence from both sides and retired to consider their decision. After enjoying a delicious meal at the expense of the Rt. Hon. Mr. Elephant, they reached their verdict, called the man, and declared as follows: "In our opinion this dispute has arisen through a regrettable misunderstanding due to the backwardness of your ideas. We consider that Mr. Elephant has fulfilled his sacred duty of protecting your interests. As it is clearly for your good that the space should be put to its most economic use, and as you yourself have not yet reached the stage of expansion which would enable you to fill it, we consider it necessary to arrange a compromise to suit both parties. Mr. Elephant shall continue his occupation of your hut, but we give you permission to look for a site where you can build another hut more suited to your needs, and we will see that you are well protected."

The man, having no alternative, and fearing that his refusal might expose him to the teeth and claws of members of the Commission, did as they suggested. But no sooner had he built another hut than Mr. Rhinoceros charged in with his horn lowered and
ordered the man to quit. A Royal Commission was again appointed to look into the matter, and the same finding was given. This procedure was repeated until Mr. Buffalo, Mr. Leopard, Mr. Hyena and the rest were all accommodated with new huts. Then the man decided that he must adopt an effective method of protection, since Commissions of Enquiry did not seem to be of any use to him. He sat down and said: "Ng'enda th'indegaga motogi," which literally means "there is nothing that treads on the earth that cannot be trapped," or in other words, you can fool people for a time, but not forever.

Early one morning, when the huts already occupied by the jungle lords were all beginning to decay and fall to pieces, he went out and built a bigger and better hut a little distance away. No sooner had Mr. Rhinoceros seen it than he came rushes in, only to find that Mr. Elephant was already inside, sound asleep. Mr. Leopard next came in at the window, Mr. Lion, Mr. Fox, and Mr. Buffalo entered the doors, while Mr. Hyena howled for a place in the shade and Mr. Alligator basked on the roof. Presently they all began disputing about their rights of penetration, and from disputing they came to fighting, and while they were all embroiled together the man set the hut on fire and burnt it to the ground, jungle lords and all. Then he went home, saying: "Peace is costly, but it's worth the expense," and lived happily ever after.

This document, presented just as it appears above (i.e. without identification as to author, title, setting, or source) was carefully selected for the discovery lesson because the instructor believed it had good potential for the discovery approach: it could be treated as a self-contained entity; was short and easily studied within a typical 45-60 minute class session; had a story-line of its own and made interesting reading; contained enough clues as to its origin and meaning to enable the participants to actually make this discovery by working with the document itself; etc. Therefore, the selection of this particular document was by no means a "random sample," but rather a conscious and deliberate choice. The author wishes to strongly emphasize this point!
Opening Strategy

The prospective secondary school social studies teachers were given the document in class (where they saw it for the first time) and asked to read it individually. Class sessions were audio taped to provide an accurate record for subsequent analysis.5

INSTRUCTOR: Here is a document I would like to share with you today. Let's take out a few minutes and read it to ourselves before we look at it together.

* * *

INSTRUCTOR: What do you think this is?

Richard: A story.

Gery: It's hard to say, because it's not a story just as it is; it's trying to say something else.

Mark: It's more than a story.

Kenny: It's obviously about imperialism.

Gloria: It sounds like one of Aesop's Fables, with—-you know—a moral at the end; but each character could be representative of something. I didn't think of imperialism, as much as Mr. Elephant being Hitler, and the Sudetenland with the hut.


INSTRUCTOR: Let's get some of these hypothesis on the chalkboard. [Teacher lists hypotheses on chalkboard.] Are there any other hypotheses?

Lewis: Parable.

Alan: Allegory.

Billy: It depends on how you interpret it, really.

Patricia: I don't think it's Hitler because though the story is "generalizable" it refers to two types of people. You know the man is referred to as a lesser being by the elephant. But Hitler, he wanted to take what was supposedly rightfully Germany's according to his beliefs. He wasn't going after an underdeveloped area, a lesser area. The ending, with all the animals fighting over that piece of territory—well, it doesn't quite fit. There is implied throughout the story two types of civilizations and it seems that they're all quite true as opposed upon non-white countries in Africa and Asia, and Latin America.
Billy: I don't know. I didn't figure this was anything more than a fable. I've read an account in a magazine recently describing some practices in different terms and it turned out it was just an American... just another way of describing something we do—I think it was combing someone's hair. I think if you generalize this thing to imperialism or China or anything, you can make any sort of fable—you know—read in words to it. It seems more or less just like somebody said, one of Aesop's Fables, when you just read in things into it, taking out some characters here and replacing them with other characters.

Barbara: You know, as I read the end, in a way it's sort of like the bit about the end justifies the means. That's Communism isn't it? It's supposed to be burning down all the huts, burning down all the states, burning down all the societies, but peace in the end will be maintained. In other words, peace is costly, but it's worth the expense. You know, it's sort of like a Communist philosophy.

Gail: I also see... well, this is after you qualified the imperialism... the urban problem. Uh, you know, the Negro is allowed to have a slum, and the white people decide for the Negroes own benefit that they're going to destroy the slum, or what they put up—middle class project—until the Negro moves somewhere else. Then the Negroes move somewhere else and they have a chance once again. Then they put up middle class projects they can't afford anymore and it becomes a cycle. But as of last summer the Negroes started doing... well, it's very funny how the man burns the huts down... and now the Negroes are burning the ghettos down themselves.

Charlie: Just like Billy says—everybody seems to be proving his point. Everybody seems to be hitting just anywhere. You can just rationalize it a little bit.

Impatience and Annoyance

At this point the class seemed to show some impatience with the multitude of hypotheses now before it. As Charlie complained, "Everybody seems to be hitting just anywhere." Impatience soon turned to annoyance and led to a demand from some of the more voiceful members of the class to know what this "thing" was; they looked to the instructor to provide the answer. Another group resisted this attempt to turn to the instructor for a solution.

INSTRUCTOR: Then are you suggesting that it can be anything?

Billy: Well, not anything, but you know, it can be rationalized into being a lot of things.
Paul: Tell us what it is!

Kenny: I don't understand how you get to that point of view--asking Dr. Seifman to tell us what it is!

Billy: I think everybody is just going to keep reading in. You have at least five different things down here. You'll think of another...

Gloria: Kenny, you said it was obviously imperialism. It wasn't obviously written about imperialism. I thought it was obviously maybe one of Josef's Fables in a book or something. That would seem more reasonable to me.

Barbara: I think maybe some Communist wrote it.

Billy: That's what I want to know! Right now! You're gonna keep thinking but you don't really know. You've got six different things. Now what is it?

Mark: You're looking for a definitive answer to this fable.

Billy: I want to know what it is! Don't keep giving ideas. We could sit here for the rest of this hour and people are gonna keep coming up with things.

Kenny: In other words, if you go to a movie you would like a big thing written on the screen saying, "This was written by so and so, with such and such background." Why can't you just see the film and determine for yourself what it's all about? Nobody has to tell you.

Repeate Request for Closure

The discussion, hypothesizing, arguing, etc., continued along with renewed calls for the instructor to settle things by telling the group what "the thing" really was. The instructor attempted to turn the question back to the group.

John: O.K., Dr. Seifman, what is it?

INSTRUCTOR: The important thing is what do you think it is?

Arlene: Well, maybe it doesn't matter what we think it is. It just matters that we would be able to find out what it is.

INSTRUCTOR: How would you go about it?

Lauretta: The way we've been going is like a process of elimination.
INSTRUCTOR: Can you eliminate any one of these?

Malcolm: No. (Laughter)

Kathy: We could do it. Why don't we just say it's a fictionalized account of something. Perhaps with moral implications. Then you can erase everything else.

Analysis of Hypotheses and Process of Elimination

The group then began a process of analyzing the various hypotheses, eliminating some and narrowing down the possibilities.

Phillip: Well, I think we can eliminate Hitler and urban riots. (Laughter)

Michael: It's not an Aesop's fable.

INSTRUCTOR: Can you support that?

Michael: It didn't sound like any of the others I've ever read.

William: Just because it started "once upon a time"?

Michael: It's too complex...

Gail: I don't think it's an allegory because I think an allegory means to represent something like opposite—by using, you know, something opposite of what it's saying. So if everybody here is thinking in terms of that this represents imperialism, then allegory should represent the opposite of what's obvious in the thinking or the reading.

Charlie: Maybe it's just a story!

Brian: Might be a special type of short story.

Gary: It's got a moral.

Barbara: Doesn't an allegory have a moral?

Confusion of Terms

As the discussion progressed it became evident that there was considerable disagreement over the meanings and distinctions between and among the various terms used by the group.

INSTRUCTOR: Are you saying then that an allegory, a fable, a parable, etc., are all the same thing?
Phillip: Maybe an allegory or something that is comparable wouldn't use animals, but a fable would have animals.

Barbara: I think allegory is being used wrong here—if I know what allegory means. I think it's representing the opposite. I think somebody said allegory—can you give us a definition of what allegory means?

Phillip: Well, I think I can, but I'm not sure if I'm right.

INSTRUCTOR: Look, here we are sitting around the Curriculum Laboratory and we can't seem to distinguish or agree on what's a fable, what's an allegory, what's a parable, etc. Can anyone suggest a way for resolving this?

Marjorie: Got any dictionaries?

INSTRUCTOR: We've got several in the room. One here, another one over here, and another one over there.

**Transitional Strategy:**

Several students looked up the different terms and read them aloud; the group tried to determine which definition seemed to "best fit" the document before them—the consensus being that it was most likely a fable of some kind. The instructor then tried to direct the group's attention to an investigation of the background of the author or authors of the document.

INSTRUCTOR: What can we tell about the person or persons who wrote this?

Kenny: It's a modern day person.

Charlie: It's not Yiddish! "Ng'enda thi ndeagaga motegi."

INSTRUCTOR: Do you know Yiddish?

Charlie: No, maybe it is Yiddish!

Alan: Spanish? No...it's not Spanish.

Charlie: It's ridiculous!

INSTRUCTOR: Why?

Charlie: Why? Because you get somebody like Tolkien who'll sit down and make a fool language. So you can't say something like this—you know—where it "comes from."
INSTRUCTOR: Where does Tolkien "come from"?

INSTRUCTOR: So we can say that Tolkien "comes from" England, can't we?
Charlie: Yeah, but you can't get that out of his writing.
Lewis: Yes you can.
Charlie: I mean you could--a little bit--you know--you could think all these crazy things. But you know....somebody from one country could write a book about another country.

Analysis of the Animals

The "relativist faction" in the class again picked up the earlier argument that "it could mean anything...but there's just no way of telling or saying...etc." The instructor reminds the group that they did in fact find a way to deal with this argument earlier in the session.

INSTRUCTOR: Well, there are some people who said earlier that we can't say what this thing is because it could be anything. And now we're at a point where most people in the class are at least fairly well in agreement—that they think they can say it might well be a fable. Now some are saying that we can't possibly say what country this person might come from. Maybe given a few minutes work on it, we might be able to eliminate one place or suggest some possibilities. Can you, for example, give us one place that the author probably cannot come from?

Lauretta: Africa.

INSTRUCTOR: Why can't the author come from Africa?
Lauretta: If he lives in that country how could he possibly throw buffaloes and alligators in with rhinoceroses and leopards in the same story? He would use other animals.

Phillip: Africans are sometimes educated in Western countries and then go back.
Lauretta: No, I'm saying I think he would use other animals, all African animals - not alligators or foxes.

INSTRUCTOR: Let's get this on the chalkboard: "It can't possibly be an African." "It might be an African with a Western education."
Richard: An alligator isn't an African animal.

Trish: It could be anybody who's had a Western education.

Billy: If you can say it's an African that's had a Western education, you can say it's an Asian who's had a Western education. You could go through the whole seven continents.

INSTRUCTOR: You say, "Western educated, can you give us some documentation for it"?

Trish: The bit about the Commissions of Inquiry. It sounds like it's English, and the Royal Commission also gives a sense of royalty.

Alan: If I had to pick out a country I'd say England.

Charlie: I say Dr. Seifman wrote it!

INSTRUCTOR: Then you think the author is "American or U.S. educated." Can you support it?

Charlie: Uh, not really, just a hunch.

INSTRUCTOR: Are all of these as good as any others or could you say, "Here's some evidence that it tends to be this, this one not that; or here's more evidence for this and less evidence for that?"

Richard: It tends to be non-African because the animals aren't African. There are at least two animals in it that you don't find in Africa and if it was even supposed to be read by somebody in Africa that relates to it, they wouldn't use those animals.

Brian: Wild buffaloes are in Africa.

Michael: Anybody could know about the animals....Don't worry about the animals.

Richard: You said alligators and fox, neither of which is found in Africa.

Kathy: You would think they'd be less familiar with an alligator and a fox then they would with a crocodile and a water buffalo.

Brian: Have you ever seen a crocodile?

Kathy: Have I ever seen one? Yes.

Brian: Have you ever seen a water buffalo?

Kathy: Yes.

Brian: Now, is this Africa?
General Confusion and Challenge

The students began arguing among themselves over the various animals and the implications of the use of these particular animals in the document before them. The "relativist faction" saw this disagreement and evident confusion (i.e. breakdown of class decorum) as support for its position.

INSTRUCTOR: Now, we've got two groups in huddles and we've got one group in battle with another. Where are we?

Billy: Nowhere!

Charlie: The story can be any place in the world and the author can come from anywhere. You can't tell. It can never be found.

INSTRUCTOR: Oh! I challenge that. In fact, I think you can find it for us.

Alan: You can eliminate some of the same ideas. England and the U.S. are both "Western educated" so England and the U.S. would be included in the Western education.

Trish: When I said Western educated I thought of a person who would be familiar with the English institution of government in regard to this tale.

INSTRUCTOR: Well, what's the evidence for English government rather than American government, rather than French government or German government?

Trish: Because it said something about, "In our opinion this dispute has arisen through a regrettable misunderstanding due to the backwardness of your ideas." It sounds like a very "Englishy" type of statement. The Germans wouldn't say something like that. The French, I don't think, would either.

Barbara: Dr. Seifman, did you write it?

INSTRUCTOR: No, I did not write it.

Alan: I think it was written by an Englishman...you know, it's just the way the phrases sound...like I think it's very English, like "my dear good elephant" on the first page. That sounds very English. And then again if I thought—if I believed—that it was a common philosophy, I'd say it was written by a Russian or a German.

INSTRUCTOR: Is there evidence here then that it's Russian? Or are you arguing now for the English?
Malcolm: I'm really getting very confused because I don't know now whether to look at the phraseology of the sentence or to look at what's inside, you know at what's being said. If I look at what's being said I could even agree with Robert on China. I think the Communist idea is very well put.

William: Well, uh, I'm not a history major and I never studied about Britain, but the Commission of Enquiry and the Imperial Commission has what the British established, a...

Michael: That's why it could be England or France.

Barbara: It looks like the author lived in a country that just fought a successful war, because he said "Peace is costly, but it's worth the expense."

Robert: No. That's the philosophy of communism, that's exactly what communism says.

Barbara: No, that's not the point though! Like they just fought a war, a defensive war or an offensive war, it doesn't matter. It could be a defensive war. But peace is costly, it cost them a lot of lives, but now they're safe.

Gary: In this thing, who do you think is the communist, the man or the animal?

Robert: The man.

Gary: The man.

Robert: Yes. The animals are all the states that will eventually fall. They'll be successful first and then they'll fall. The man is the one who burned down the huts.

Arlene: It says, "Once upon a time." Now I don't know...Is that native English or American?

Trish: The word "honorable." The word honorable is spelled "h-o-n-o-u-r" which is an English spelling--that's not the American spelling.

Charlie: Yeah, but I spell it that way.

Billy: So do I.

Brian: It can't be American--let's see if we can find a couple of other words that end in "o-u-r."

Kathy: They use the word "ministers," and we never use "ministers" in America.
Call for a Vote

As the discussion appeared to be moving less and less toward a definite agreement, impatience again began to set in.

Billy: Could we vote on it, 'cause everybody has a different opinion?

INSTRUCTOR: Did we vote on what we thought this thing was or did we have some real hard evidence?

Billy: O.K. So then...there's just no evidence!

INSTRUCTOR: Trish has asked us to look at the spelling of one word--"honourable." Are there any others?

Brian: "Minister."

William: "Royal Commission."

Mark: Well, they also use the "King of the Jungle" and we don't have a king.

Brian: They use titles--"The Rt. Hon."

INSTRUCTOR: Some think that this person could be German educated, United States educated, English educated, any one of these--or do you think one of these seems to be more plausible at this point?

Richard: Oh, I'll stick to the United States.

Trish: I make a motion for England.

Malcolm: I second it.

INSTRUCTOR: England, English...You think then? Now the question is this, does the person who wrote this come from England, or is this person English educated, or is...

Marjorie: Is he writing about England?

Brian: He is writing in England, or he wouldn't use the "OU" spelling.

Kenny: He was educated in that tradition, but I don't think you could say where.

Brian: In England they spell honourable that way.

Kenny: Well--it could be an English colony--like Rhodesia.
Building Upon Tentative Hypotheses

At this point the instructor attempted to get the group to build upon those tentative hypotheses for which there seemed to be consensus.

INSTRUCTOR: Let's see where we are so far. You seem to think the author is English educated and that this thing is a fable. Try to put the two together. If we know what a fable is supposed to do, based upon our dictionary definition ("a very short story that teaches a lesson...usually about animals who act and talk like people"), then the question is what seems to be the lesson that's taught?

Gary: Well, if he's English educated, it would be imperialism. I think so anyway...

Kenny: I think he's had English background. He may not be from England. He might be from one of the countries colonized by England.

English/England vs. English English Colony

There now appeared to be two major hypotheses before the group:

INSTRUCTOR: Some say he may be English in the sense that he resides or lives in England. Some say he may be English educated residing or living in one of the colonies. You seem to be in general agreement about these two possibilities. Is there any way of putting either of these two propositions to the test,...some evidence for this in the document?...When the man sits down, what does he say?

John: He's saying "there is nothing that treads on the earth that cannot be trapped."

INSTRUCTOR: What's he say John?

John: "Ng'enda thi ndeagaga motegi."

INSTRUCTOR: O.K., listen to the propositions again. He is English educated and he is in England, he is English or British, he is English educated and living in one of the colonies. Is there any more support for one possibility over another?

Lewis: The colonies. It's Africa.

John: I think you can say that he has been in someplace other than England, and perhaps English is his second language. It's a crises for him and very frequently people in tight spots will lapse back into what is more clear for their personality, like,
John (Cont.) oh, if you saw THE GREAT ESCAPE. These people, the Americans, were escaping from a German prison camp, and they were impersonating Germans and the way they were caught...someone said: "Have a nice trip" (in German) and the guy turned around and said "Thanks" (in English). It's like...you lapse back into these patterns, which you maintain, which can be subjected to other patterns. So you might say he was probably born somewhere other than England, probably a colony and was educated in English tradition.

Gail: Now aren't we getting at the origin of the man in the story and not necessarily the author? I mean, it's written from his point of view, but the author and the man in the story are not the same person, I don't think, and if we solve this problem of finding out who the man in the story is we still haven't solved the problem of author.

INSTRUCTOR: Well, we could ask...from who's point of view is it being told?

Gail: The man's...but the man in the story and the author are not necessarily one and the same person.

INSTRUCTOR: O.K., then let's put...this way. If we're not willing to say what is the place of origin of the author, can we say what is the origin of the point of view of the speaker of the story? Would you be willing to accept that?

Gail: Yes.

INSTRUCTOR: O.K., and where would you place it?

Alan: English colony.

INSTRUCTOR: Rather than native of one part of Great Britain? Rather than a Londoner?

Alan: Yes.

INSTRUCTOR: I see. Would anyone want to narrow it down to any particular area of British colonization? Would you be willing to go that far?

Lewis: I'd go to Africa.

INSTRUCTOR: Is there any internal evidence in the story that would tend to support that in addition to language?

Phillip: Maybe the animals, it's a jungle story.

INSTRUCTOR: Doesn't British Guiana have jungles?

Kathy: Are there lions in South America?
Closing Strategy and Assignment

Sensing that the class hour was just about up, the instructor attempted to bring the session to a close and also set the stage for the follow-up discussion at the next class meeting:

INSTRUCTOR: When we started out many said that "You just can't tell anything about this thing...there's just no evidence, etc." Make a note of where you think we are at this point. For our next class meeting, reflect back upon today's class and come prepared to discuss what was going on today and your reactions to it.

III. ANALYSIS OF CLASS REACTION TO DISCOVERY ENCOUNTER

Polarization

An analysis of the transcribed tapes of the "discovery" session and those of the subsequent class meeting at which the prospective teachers discussed their reactions reveal that not only was student reaction to the discovery session mixed, but that a marked polarity developed within the class.

Opponents: Charges

Undoubtedly, the most vociferous members of the class were opponents of the "discovery approach." They leveled the following charges at the discovery mode:

1. (Time Consuming): "It's too drawn out." "It takes too long!" "There just isn't enough time for a teacher to teach this way and have the kids cover all they have to cover."

2. (Relativism): "With the discovery approach we can just read anything we want into anything." "It's all relative!"

3. (Uninteresting): "The material itself wasn't interesting." "It just didn't hold my interest." [Note: Some who raised this objection thought the discovery approach "might stand a chance" if the material were interesting.]

4. (Not Social Studies): [criticism of the method] "This approach might be a good education for a lawyer, to get at the facts of a case or something, but I can't see this discovery method being of any value for a social studies class." [criticism of the material] "I don't see how you could use this material for a social studies class—what does it have to do about history?"
5. (No Content): "There's nothing factual that came out of our session with the document. In social studies classes you have to learn factual things." "There's just no content in this approach."

6. (Unrealistic): "You just can't get a real class of kids to figure out all these things from a thing like this. Maybe we could do it but they couldn't."

Proponents: Claims

Proponents of the "discovery approach" marshalled the following types of arguments in support of the method:

1. (Motivation): "It's a good way to approach materials because it's interesting." "It's motivating and gets you involved in what's going on."

2. (Skills): "You learn skills of finding out how to go about finding out information." "It's like learning how to learn about social studies."

3. (Understanding): "It leads to greater understanding." "The point is that you're trying to discover it yourself...you take an active part, not just sit there and have somebody tell you who wrote it and what it's all about."

4. (Learning from Others): "I learned a lot from what others had to say and even changed my mind after hearing different arguments."

5. (Content): "It has content. You can find out what these different animals represent and even locate the place and period of history talked about. This could lead to a discussion of imperialism."

6. (Social Studies): "The document does have something to do with social studies." "The man's weak and can't do anything...like the African nations in the 19th century, when the English and others came over and conquered them. The man was weak and had to submit."

Request for Instructor's Opinion

Inevitably, the group turned to the instructor and asked his opinion:

Gloria: Was it all a waste of time?

Allan: Did we accomplish anything?

INSTRUCTOR: I think we saw that if you gave a group of people a document that didn't have an identifying source as to its title or its author, and did not identify it as being of a particular kind of literary work, they could distinguish the fine shades of
distinctions between various modes of literary works. I think we could also say that in the hour the group was able to identify certain combinations of words, syntax (whatever you want to call it) that made it sound like it came from a particular culture rather than some other kind of particular culture. I think we could say that in the hour the group was able to identify that although the language of the document is a language we use (the language is English), there are even variations in that written language so that some cultures using the same alphabet we use have a variant in the spelling—and the variant in the spelling might be a clue to the cultural origin of the author. I think we could also say that there might be a difference between a language that is first nature to a person—and a person's second language. That is, a distinction in terms of the language one thinks in and then translates into—i.e. "Ig'enda thi ndesaga nortegi," which literally means 'there is nothing..." I think we would also say that the phrase "...you can fool people for a time but not forever" sounds like a mis-memory of a familiar quotation (one that we would expect someone to know) and that this might be a clue to the person's "distance" from the source of that original quotation.

Another thing that happened was that we didn't all hear (or listen to) what everyone else said. I had the advantage of listening to the tape so I was able to listen closely to what was said. Another thing that people said was that certain animals are distributed across the globe in certain combinations in certain places, and tend to be found in one place rather than another place. I think we could also say we had at least two pretty good hypotheses as to, if not where the person who wrote this came from, then at least where he was educated...and further, that we might even distinguish between where a person lives now and where he received his education, from the way he communicates...the way he writes...the language he uses, etc. We also seemed to say we could distinguish an author's point of view in terms of whose side (animal or man) was being taken in this narrative.

As for myself, I would say the least important thing is the final answer of "who" wrote it, and the most important thing is "how" the group went from listing possibilities, establishing hypotheses, eliminating certain hypotheses, narrowing down these hypotheses, etc., to saying finally, "these seem more probable than others."

Conclusion

Transcriptions of the tape recorded class sessions clearly demonstrate that reactions to this first-hand experience with the discovery approach were
"mixed." More specifically, polarization occurred—reactions were sharply divided either for or against the discovery approach. Feelings ran high and there was little middle ground. The students (all social studies teacher certification candidates) either intensely liked the "first-hand" experience and supported the discovery approach (this group was in the minority), or were extremely displeased with the "first-hand" experience and found the discovery approach not of their liking (the latter not only constituted the majority but were also the most vociferous). Subsequently, the students were each asked to design an original social studies lesson in the "discovery mode" and actually teach it to a group of students in any of the neighboring public schools. This additional "first-hand" experience—now as teacher—tended to confirm and support each student's original attitude toward the discovery approach. That is, the proponents reported that "It was great...they [the public school students] really made some great discoveries," and the opponents reported that "It was really a bad scene...they didn't get anywhere...a real waste of time."

Postscript

As a postscript, it should be noted that the following semester when these same students were doing their student teaching, many sought out the instructor and asked to borrow "that document we did in class" for use with their own classes. Most interesting of all, at least to this writer, is the fact that a substantial number of those asking to borrow the "document" were among the vociferous majority who during the preceding semester were so strongly opposed to the "discovery method." When asked why they now wanted to try this approach, the general response was something like this: "It's so hard to get these kids of mine interested in anything. Maybe this will work?"
Footnotes


2 Although the terms "discovery" and "inquiry" are commonly used interchangeably, the author's position is that there are very important distinctions between the two instructional strategies. A detailed discussion of this point appears in the chapter on "Teaching Strategies" by Eli Seifman, in The Teacher's Handbook, Dwight Allen and Eli Seifman eds. (Chicago: Scott, Foresman and Co., 1971).

3 The term "document" is used in its most comprehensive sense, as described by Louis Gottschalk in Understanding History, A Primer of Historical Method (New York: Alfred A. Knopf, 1960), p.57, and includes any source whether written, oral, pictorial, or archeological, etc.


5 Almost all class sessions of the methods and materials class were audio taped and the tapes made available to the students (upon request) for subsequent review and analysis. Therefore, by the time of this class session - which was almost at the midpoint of the semester - the students were quite familiar with the presence of the tape recorder.