A METHODOLOGICAL APPROACH TO THE INITIATION OF
REFLECTIVE THINKING IN THE SECONDARY
SOCIAL STUDIES CLASSROOM

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Harry Searles, B.S., M.A.

* * * * *

The Ohio State University
1980

Reading Committee:
Dr. Raymond H. Muessig
Dr. John C. Belland
Dr. Robert E. Jewett

Approved By

Advisor
Department of Humanities
Education
To those of the past,
    for the gift of reflection;
To those of the present
    who value it;
To those of the future
    who will prevail because of it
or perish without it.
ACKNOWLEDGEMENTS

First, I would like to acknowledge my advisor, good friend and now colleague, Dr. Raymond Muessig, for his un-tiring efforts and assistance in seeing me to the end of this work. No student could have asked for or received more from an advisor.

I would also like to acknowledge the assistance I received from the other two members of my reading committee, Dr. Robert Jewett and Dr. John Belland. I always found their advice and criticism to be constructive and most helpful.

I would also like to acknowledge all of the teachers and students -- especially Mrs. Cynthia Payne -- who participated in this project.

In addition, I would like to acknowledge Dr. Jon Tafel who was a constant source of encouragement.

Last, but by no means least, I would like to acknowledge my loving wife, Ann, for her inspiration, support and nimble typing fingers.
VITA

January 13, 1947. Born - Columbus, Ohio


1970. B.S., The Ohio State University, Columbus, Ohio

1970-1972 Social Studies Teacher, Columbus Public Schools, Columbus, Ohio

1974. M.A., The Ohio State University, Columbus, Ohio

1974-1977 Teaching Associate, Department of Humanities Education, The Ohio State University, Columbus, Ohio

1977-1978 Educational Specialist, The Ohio Historical Society, Columbus, Ohio

1978-present. Supervisor of Education, The Ohio Historical Society, Columbus, Ohio

PUBLICATIONS


FIELDS OF STUDY

Major Field: Secondary Social Studies Education

Studies in Social Studies Education. Professor Raymond H. Muessig

Studies in Curriculum and Instructional Media. Professor John C. Belland

Studies in American History. Professor Paul C. Bowers
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ACKNOWLEDGEMENTS</th>
<th>iii</th>
</tr>
</thead>
<tbody>
<tr>
<td>VITA</td>
<td>iv</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td><strong>Chapter</strong></td>
<td></td>
</tr>
<tr>
<td>I. THE IMPORTANCE OF BELIEFS IN EDUCATION</td>
<td>8</td>
</tr>
<tr>
<td>Warranted Beliefs versus Truths</td>
<td>15</td>
</tr>
<tr>
<td>Methodological Implications</td>
<td>20</td>
</tr>
<tr>
<td>II. REFLECTIVE THINKING AND BELIEFS</td>
<td>25</td>
</tr>
<tr>
<td>III. REFLECTIVE THINKING AND VALUES EDUCATION</td>
<td>36</td>
</tr>
<tr>
<td>IV. TECHNIQUES FOR THE INITIATION OF REFLECTIVE THINKING IN THE SOCIAL STUDIES CLASSROOM</td>
<td>57</td>
</tr>
<tr>
<td>Technique Number One</td>
<td>61</td>
</tr>
<tr>
<td>Technique Number Two</td>
<td>73</td>
</tr>
<tr>
<td>Technique Number Three</td>
<td>113</td>
</tr>
<tr>
<td>Technique Number Four</td>
<td>121</td>
</tr>
<tr>
<td>Technique Number Five</td>
<td>142</td>
</tr>
<tr>
<td>V. RIGHT-TO-WORK VERSUS UNION SECURITY: AN AMERICAN LABOR HISTORY UNIT</td>
<td>171</td>
</tr>
<tr>
<td>Purpose</td>
<td>172</td>
</tr>
<tr>
<td>Approach</td>
<td>173</td>
</tr>
<tr>
<td>Objectives</td>
<td>178</td>
</tr>
<tr>
<td>Content</td>
<td>181</td>
</tr>
<tr>
<td>Materials</td>
<td>185</td>
</tr>
<tr>
<td>Procedure</td>
<td>187</td>
</tr>
<tr>
<td>Evaluation</td>
<td>188</td>
</tr>
<tr>
<td>VI. SUMMARY</td>
<td>205</td>
</tr>
<tr>
<td>LIST OF REFERENCES</td>
<td>215</td>
</tr>
</tbody>
</table>
INTRODUCTION

This work has been written as a resource for preservice and inservice teachers who wish to experiment with or employ reflective thinking as an approach to and a goal of classroom instruction. It is hoped that it will serve as a useful instrument in helping teachers deal with the very real problem of putting theory into practice. The writer's belief that this work can be instrumental in helping teachers is based upon several assumptions about reflective thinking and classroom instruction.

---It is assumed that reflection can take place in most secondary social studies classrooms when the teacher is predisposed to that method of education and enjoys the freedom to employ it. This assumption is based upon the observations of the writer as a participant within the school setting as a classroom teacher and as a university supervisor of student teachers. The writer has been present and participated in classes where students have openly examined their beliefs in light of existing evidence and within the confines of a structural process.

---It is assumed that many teachers either can or already have grasped a basic understanding of reflection as a theory. Although reflection can be and often is difficult
to comprehend as an approach to education, most student
teachers and many teachers that the writer has encountered
seem to have little trouble in dealing with it as a means to
the formation of warranted beliefs. This is not to suggest
that they practice a reflective approach or have made a
commitment to it, but only to point out that they are at
least capable of recognizing it and understanding it as an
alternative to approaching problems.

---It is assumed that many social studies methods stu-
dents, student teachers and teachers view reflection as a
desirable approach to and outcome of instruction. Again,
this assumption is based upon the writer's work with the
above mentioned groups. A large majority of the social
studies education students with whom the writer has been
associated at this university have expressed a belief that
reflective thinking is a superior theory of education. This
observation may not be too surprising considering the rich
experimentalist tradition of the College of Education at the
Ohio State University. However, the writer's assumption
is also supported at the national level by a recent study
completed for the Curriculum Information Network of the
National Council for the Social Studies. That study repor-
ted that of five approaches to social studies education
which were identified, critical or reflective thinking
ranked first in personal preference for a nationwide sample
of social studies educators.¹
Finally, it is assumed that only a small minority of students in very few social studies classrooms ever engage in reflective thinking related to social studies problems. After nearly four years as a university supervisor, sitting in on classes led by teachers and student teachers, the writer has observed relatively few examples of students making use of social science data in the pursuit of warranted beliefs related to social studies. This assumption also seems to be supported by national statistics. Again from the Curriculum Information Network, Morrissett et al. report that of the five approaches to social studies instruction identified, social studies educators specified critical or reflective thinking as third on a scale measuring their beliefs concerning frequency of use nationally. To be more specific, based upon their observances of social studies classrooms across the nation, these educators estimated that reflective thinking was the primary goal of instruction in only six percent of the cases. A drop of another three percentage points would have relegated reflection to last place. This was to be compared to an overwhelming seventy-two percent rating for "knowledge of history" as the primary goal of instruction.²

When this final assumption is juxtaposed with the initial three an interesting paradox becomes evident. If these assumptions are even partially warranted--i.e., if reflection can take place in the classroom, if many teachers
can demonstrate an understanding of reflection as one means to the formation of warranted beliefs, and if many teachers embrace reflection as a primary goal and method of education, then why is so little of it taking place in classrooms? That question is of paramount importance to the purpose of this work. To be sure, there are myriad reasons why more reflective thinking does not take place in social studies classrooms. However, this writer believes that perhaps the most important of these has to do with teaching methodology. That is to say, many teachers have the ability, the opportunity and the desire to employ reflection, but they have not developed the methodological insights and techniques needed to do so. What they require is assistance in designing educational exercises which promote the use of reflective thinking on the part of the students in their classrooms. This work is an attempt to provide such assistance.

It is a major goal of this work to illustrate a fundamental relationship between a defined process, which hinges upon the examination of beliefs, and a series of teaching techniques designed to encourage students to express beliefs in an open manner, as a key to the promotion of reflective thought in the classroom. If what is said in this work is warranted, it is warranted by the definition and the construct of the process, and by the nature of the techniques described. That is, if reflection by definition requires
the examination of personal beliefs, and if a series of techniques may be identified that focus upon encouraging students to take the first step toward examining beliefs—stating beliefs—then the teacher may have at hand the potential for promoting reflective thought in the classroom. It becomes a matter of recognizing the relationship and putting the two together. All of this is not to say that reflection will take place. The teacher must know where to go and what to do after beliefs have been expressed. It does, however, lay the groundwork which is necessary if reflection is to take place.

For the convenience of the reader, this work has been divided into six chapters. Chapter one deals with the concept of belief and several epistemological problems related to that concept. In chapter two the process of reflective thinking is considered and the relationship between beliefs and reflection is examined. Chapter three explores the association that exists between reflective thinking and values education. Chapter four provides the reader with a series of teaching techniques—in the generic sense of the word—which the writer has identified as having the potential to initiate the reflective process. In addition, specific examples of each technique, as well as a number of responses from secondary social studies students, will be presented to illustrate their effectiveness. Chapter five consists of a model unit—complete with directions and
resource materials--designed to demonstrate how several of the techniques described in chapter four may be incorporated into the total process of reflective education. Chapter six addresses itself to concluding remarks and the possibilities for further study.
FOOTNOTES

INTRODUCTION


2 Ibid.
CHAPTER I

THE IMPORTANCE OF BELIEFS IN EDUCATION

We are incredibly heedless in the formation of our beliefs, but find ourselves filled with an illicit passion for them when anyone proposes to rob us of their companionship. It is obviously not the ideas themselves that are dear to us, but our self-esteem which is threatened. We are by nature stubbornly pledged to defend our own from attack, whether it be our person, our family, our property, or our opinion.

James Harvey Robinson

In any work professing to advance a means or method of education it is requisite that in the initial stages it is made clear to the reader what is meant by the use of certain essential terms. This entails defining those terms as well as elucidating upon the relationships which exist between them. This work attempts to inform secondary social studies teachers of a group of specific teaching techniques which, if employed in the classroom, might facilitate the use of a method of education which centers upon the beliefs of students. However, before that method of education and the techniques related to it may be dealt with in a meaningful manner, it is imperative that the reader understands what is meant by the use of the terms "beliefs" and "education". Thus, this chapter will focus upon the
writer's use of those terms, including definitions, their relationship to each other, and their significance to this work.

The process of education has undergone a great deal of scrutiny during the twentieth century. What was previously the rather leisurely philosophizing of a few great thinkers or men of class has developed into the concentrated efforts of professional educators, analytic philosophers and learning psychologists to define the term education. With the increased influence of the behavioral sciences on all aspects of life it was, perhaps, inevitable that education would come to be described more and more in the language of the behaviorist. It became commonplace towards the middle of the century to define education as a planned encounter between a learner and a stimulus which resulted in a desired change in behavior on the part of the learner. Those who subscribed to such a definition stressed the importance of a change in behavior. Many went so far as to claim that if a change in behavior was not observable education had not taken place. Curriculum committees, classroom teachers and students were and still are bombarded with behavioral objectives. In this era of competency based education student achievement is determined by the difference between entry and exit behaviors and teaching performances are evaluated on the basis of measurable responses of the students. Perhaps this is as it must be. After all, it is not yet
possible to penetrate the mind of a student to discover what he or she may have learned as a result of a teacher's efforts. The student must manifest some behavior to give the teacher some indication of whether or not education has taken place.

Nevertheless, because a student fails to manifest the "correct" response or change in behavior is no assurance that education has not taken place. The behaviorist position has been somewhat modified in recent years to allow that learning is an internal process, and that to attempt to define an internal process in terms of external behavior may result in serious difficulties. A change in behavior is merely an observable manifestation of a more significant change which has already taken place. That change is in the mind of the learner. That teachers are dependent upon physical behavior to measure what has been learned by a student is a situation which must be lived with, but that in no way negates the verity of the belief that the primary change takes place in the mind, and results in the change in behavior. It is in the mind that learning takes place. It is in the physical world that one demonstrates what has been learned. Thus, a physical response or change in behavior may give evidence that education has taken place, but it does not define what education is.

As used in this work, education may be taken to mean a planned encounter between a learner and a stimulus which
results in some modification of the belief system of the learner. It is important to note here that by "modification of the belief system of the learner" the writer does not mean that the learner's beliefs should be brought into line with the beliefs of others. The emphasis is upon the change which results from the encounter, not upon the content of the change.

This definition is, admittedly, similar to the one previously stated in that there is a learner, a stimulus and a planned encounter designed to bring about change. The difference lies in the focus of the change. The former focuses upon an observable change in behavior. The latter relies upon an observable change in behavior for purposes of measurement or evaluation, but focuses upon a change in the beliefs which underlie changes in behavior. This difference is subtle, but important. The former focuses upon the consequences of underlying change, while the latter focuses upon and deals with the substance of the change. In physical science this may be analogous to the difference between a physician who focuses his attention upon treating the symptoms of a disease, as opposed to a physician who realizes that in the long run the more important matter is what brought about the changes which resulted in the symptoms being present. There is little doubt that in most cases the second physician will be more successful at his profession because his attention is upon the underlying
causes of change rather than the consequences.

For the secondary social studies teacher, too, the focus should be upon what causes change, as opposed to the consequences of change. In other words, the teacher should focus upon the beliefs of the students. As Alan F. Griffin succinctly put it, "The high school teacher of history who is not directing his materials toward the present beliefs of his students, or at least toward certain hypotheses about the nature of these beliefs, is addressing the air or talking to himself..."¹

Traditionally, classroom teachers have made few purposeful attempts at dealing with student beliefs. In fact, many have made purposeful efforts not to deal with them. Some teachers have attempted to avoid examining beliefs by resorting to such banal responses as "everyone is entitled to his or her own beliefs." Other teachers have simply made beliefs a taboo area inappropriate for discussion in a classroom. These cases may be self-deception at its most absurd in education. Whether they choose to or not, teachers are constantly dealing with the beliefs of students. In a social institution established for educational purposes where membership is compulsory it is inescapable that those who attend will have some of their beliefs altered in one way or another. The choice which remains for teachers is not whether beliefs will be dealt with, but whether they will be dealt with in a purposeful manner.
It is not likely that beliefs will be dealt with in a purposeful manner in the classroom as long as teachers remain uninitiated in or unreceptive to the idea that they are dealing with beliefs. That will not occur until teachers are able to disengage themselves from a well-entrenched tradition of Western education. Throughtout the history of Western education teachers have concentrated their efforts upon the acquisition of Truth under the appellation of knowledge. Western educators have venerated Truth as unadulterated reality and they have striven for its procurement as if it were an elusive apparition. Methodology, for the most part, has meant how to get students to "know" Truth. If students engaged in the proper exercises they would come to "know" mathematics, or "know" religion, or "know" history. The choice of the verb employed belies the certainty of educators that Truth may be attained if the proper formulae are applied.

Seldom, it seems, have educators hesitated long enough to consider the epistemological problems inherent in viewing education as the acquisition of Truth. Those problems have served as a fountain of discord among philosophers for ages. They center upon such fundamental questions as: Does Truth exist? If so, where? Is there a methodology suitable for approaching Truth? Is mankind capable of ever recognizing and comprehending Truth if it does exist? As yet there are no definitive answers to these questions. Nonetheless,
teachers go on as they always have, as if they were oblivious to the problems that arise as a result of these questions.

Twentieth century psychologists interested in perceptual studies have introduced new uncertainties pertaining to the acquisition of Truth. Controlled experiments in laboratories as well as field studies have indicated that even the senses may not be relied upon as avenues to Truth. These studies have demonstrated that a person's state of mind and past experiences (frame of reference) often act as a filter in determining what is observed or sensed. Thus, people see, to a certain degree, what they wish to see (selective perception). Any attempt to translate and communicate what the senses have experienced results in even greater distortion.\(^2\)

In light of all of the controversy and evidence which exists to at least cause some degree of doubt concerning the notion of Truth, it seems a wonder that teachers still insist that students come to "know"it. It is as if students were astronauts exploring space in search of an unknown and unrecognizable cosmos which may not exist, aided only by a set of instruments which may be neither functional nor appropriate for the search. In lieu of any definitive methodology or conclusive evidence, they are usually required to settle for someone else's version of Truth.
The irony of this situation is that in matters related to existence and the material world, what one believes is of far more significance than Truth. If, for example, the statement "the earth is a spheroid" were considered a Truth, it would still be of no instrumental value unless people choose to believe it to be so and acted accordingly. Of course, one may claim that people "know" that the earth is a spheroid, meaning that it is more than a state of believing. That, however, would merely be a retrogression to the previously mentioned epistemological questions concerning how one comes to "know." Until some incontestable methodology for knowing comes to light, it appears that mankind must rely upon beliefs. Thus, the major thrust of education should not be towards acquiring more Truths, but towards encouraging students to develop and make use of skills and methodologies which may lead to the formulation of warranted beliefs.

WARRANTED BELIEFS VERSUS TRUTHS

Doubt is not a pleasant condition, but certainty is an absurd one.-

Voltaire

There are no eternal facts as there are no absolute truths.-

Friedrich Nietzsche
The distinction between warranted beliefs and Truths is subtle but important. Light may be shed upon this distinction by considering the definition of the word "belief". Webster's Seventh New Collegiate Dictionary defines the word "belief" as "a state or habit of mind in which trust or habit is placed in some person or thing." In a work which is particularly insightful concerning this topic, Reflective Thinking: The Method of Education, H. Gordon Hullfish and Philip Smith state that "Any belief may be described as a configuration or pattern of meaning which has become more or less fixed." The distinction between warranted beliefs and other types of beliefs comes from the process by which the "configuration or pattern of meaning" comes to be fixed. Hullfish and Smith suggest several alternatives in this regard, e.g. emotional attachment, conditioning and reflective activities. It is the last mentioned of these alternatives which separates warranted beliefs from other beliefs. A warranted belief has undergone intensive examination "in light of the grounds that support it and the further conclusions to which it tends." It "is believed in (or disbeliefed in) not on its own direct account, but through something else which stands as witness, evidence, proof, voucher, warrant; that is, as ground of belief." From an empirical point of view, warranted beliefs, if placed on a continuum of beliefs, would fall at that end of the continuum with which one would associate
the greatest amount of certainty. In fact, warranted beliefs frequently become so closely associated with certainty that they are often mistakenly referred to as Truths.

Beliefs which are warranted are distinct from Truths in at least two ways. First, warranted beliefs are of a more limited nature than Truths. Warranted beliefs evolve out of the use of the reflective process, within the framework of experimentalism. Such beliefs make no claim to portray absolute realities. They are the results of attempts to gain an understanding of experience through a process of examination and restructuring. As such, warranted beliefs are always limited by the nature of the process and the resources (evidence, time, energy, et cetera) available. There are, on the other hand, no such reservations concerning Truths. Truths are categorical statements which are universal in scope. They allege to describe or explain absolute reality, past, present or future. Such an allegation assumes, first, that one is capable of comprehending absolute realities, and second, that one knows how to go about doing so. Unless one is prepared to make such far-reaching metaphysical and epistemological claims, it seems that warranted beliefs, because of their pragmatic applicability within the limited framework of experimentalism, may be preferable to Truths as a goal for education.

A related, but slightly different distinction between warranted beliefs and Truths is that the former are far
more flexible than the latter. Because warranted beliefs are based upon the evidence that is available at any given time, they are always subject to review or reappraisal with the advent of new evidence, or new interpretations of old evidence. Truths, on the other hand, have an air of certainty or finality about them which leave them no longer open to examination. To really "know" the Truth about something means that it no longer needs to be questioned. It becomes a closed area. The unfortunate result is that "knowledge" becomes inflexible, and diverse and creative attempts at interpreting the human experience are discouraged. For those who question the value of diverse and creative thought, one might consider the Truths we would still be living with today, had not some men dared to challenge their veracity and view them as beliefs which might not be warranted. We would "know" that the earth is the center of the universe; we would "know" that life springs spontaneously from inanimate objects; we would "know" that there are only four elements; we would "know" that Christopher Columbus discovered America; and we would "know" that one can judge a person's character by the size and shape of the skull. With the aid of hindsight it is relatively easy for one to recognize such once-venerated Truths as examples of beliefs which have proven to be unwarranted. Yet, it must be remembered that those beliefs were "known" to be True and passed from one generation to the next in
much the same manner as what is "known" to be True today
is passed on to modern public school students to be com-
mitted to memory.

AFFECTIVE IMPLICATIONS

In the matter of belief we are all extreme
conservatives. -

William James

Thus far, the emphasis of this discussion has remained
within the confines of the cognitive domain. There is,
however, an affective dimension to be considered. Beliefs
frequently manifest themselves in the form of attitudes,
and thus, play an important role in the affective domain.
An attitude may be defined as "a feeling or emotion toward
a state or fact" which, in addition, "can only be stated as
a relationship between the self and something in the en-
vironment." Thus, a statement such as "I do not like
history" may be considered an attitude. Such statements may
be the results of prolonged social conditioning, or they
may be merely the flippant parroting of an emulator. Often,
however, they are the manifestations of beliefs which are
either held at the conscious level, or may be brought to
the conscious level. For instance, the attitude "I do not
like history" may be the manifestation of several beliefs,
such as, "history is boring," "history means memorizing
names, dates and events" and "history has no relevance."
It may be seen from this example that the "warrantability" of the beliefs can have a direct effect upon the nature and content of an attitude. If the student who expresses the attitude "I do not like history" as a result of the above-mentioned beliefs, were to become a member of an exciting, active and relevant history class, it is possible that the attitude might be altered. The implications of this observation, for educational purposes, should be clear. "So long as an attitude remains below the level of consciousness, so that it must (to be known at all) be ascribed to an individual by others, rather than consciously held to by himself, there is no way under the sun in which subject-matter can be brought to bear upon it." If, however, a teacher can somehow get a student to become aware of, and to consciously consider a given attitude at the level of the beliefs which support it, then the attitude may be dealt with in the same manner as has been previously suggested for assessing beliefs, i.e. "in light of the grounds that support it and the further conclusions to which it tends." 

METHODOLOGICAL IMPLICATIONS

Let the tutor make him pass everything through a sieve and lodge nothing in his head on mere authority and trust...Let variety of ideas be set before him; he will choose if he can; if not, he will remain in doubt. Only fools are certain and assured. – Montaigne
It should, at this point, be evident that beliefs, as distinct from Truths, must be an integral component of any meaningful discourse on theory of education. Even those pedagogues who still cling to Truths must admit that in the final analysis, in terms of human performance, Truths are only functional to the degree to which people believe in them. It was stated earlier in this work that the major problem for teachers, in terms of content, is not how students can come to acquire more Truths, but rather how they may come to formulate warranted beliefs. If one accepts the contention that warranted beliefs should be dealt with in the classroom, the methodological problem of how to deal with them still remains.

The problem of how to deal with student beliefs in the classroom may be approached by considering either of two extremes. The teacher may attempt to identify and transmit a set of beliefs (usually under the aegis of Truths) for students to commit to memory, or the teacher may design activities which provide students with opportunities to develop a process for formulating beliefs which are warranted by empirical evidence.* Put another way, the teacher may teach the students what to think, or he/she may teach

---

*In the case of the social studies classroom, the latter alternative means that the student uses the information available from one or more of the social sciences to try to formulate warranted beliefs rather than merely attempting to commit that information to memory outside any meaningful context.
the students how to think. The last mentioned of these two positions, the reflective approach to education, is the position which this work endorses. There is no need in this manuscript to attempt to defend reflective thinking as either the more desirable or the more effective of the two positions, as an approach to education. That task has been more than adequately accomplished within the past century by numerous philosophers and educators. However, it is imperative that the nature of reflective thinking and its applicability as an educational methodology be examined. The next chapter will consider the nature of reflective thinking and its relationship to educational methodology.
FOOTNOTES

CHAPTER I

1 Alan F. Griffin, A Philosophical Approach to the Subject Matter Preparation of Teachers of History, (unpublished doctoral dissertation, The Ohio State University, 1942) 177.

2 Although there are numerous works related to this subject, two of the more primary ones to which the reader might wish to refer are: Adelbert Ames, Visual Perception and the Rotating Trapezoidal Window, (Washington: American Psychological Association, 1951); and Earl C. Kelley, Education for What Is Real, (New York: Harper and Bros., 1947).


6 Ibid., 11.

7 Webster, op. cit., 57.

8 Griffin, op. cit., 149.

9 Ibid., 150.


CHAPTER II
REFLECTIVE THINKING AND BELIEFS

The brute necessity of believing something so long as life lasts does not justify any belief in particular. - George Santayana

Perhaps the best way to begin a discourse concerning the nature of reflective thinking is to cite John Dewey's classic definition from the 1910 edition of How We Think. In that work Dewey defined reflective thinking as the "active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends..." In addition, Dewey pointed out that reflection is composed of two phases, or what Alan Griffin termed "irreducible elements": 

1. A state of doubt, hesitation, perplexity, mental difficulty, in which thinking originates, and
2. An act of searching, hunting, inquiring, to find material that will resolve the doubt, settle and dispose of the perplexity.

Of the two phases or "irreducible elements", the latter - the act of inquiry - has historically received proportionately more attention in the literature.
Although there are some disagreements concerning terminology employed or the sub-division of individual steps, it is generally agreed that inquiry in its most elemental form consists of: (1) the diagnosis and definition of a problem or difficulty; (2) the rise of suggestions or hypotheses; (3) the elaboration of suggestions or hypotheses via deductive reasoning; (4) the collection and consideration of pertinent data; (5) the testing of suggestions or hypotheses; and (6) the formulation of conclusions.

In addition to the steps involved in the process of inquiry there is also a group of axioms which has evolved concerning the use of that process:

1. Whenever one belief or conclusion is accepted in preference to another, it is presumed that reasons exist for its acceptance. The grounds for acceptance may be scant, but so long as they are better than the grounds any competing belief can offer, they justify its acceptance.

2. Conclusions are always made provisionally. All knowledge is assumed to be relative, in the sense that no question is closed to reexamination provided a reason to reexamine it develops. This does not mean that one may not establish laws or principles which are assumed to be valid indefinitely. Such laws are not absolutes to long as there is a willingness to reopen the question of their validity.

3. Conclusions are consistent with each other. Contradictory beliefs can never be true at the same time and under the same conditions. This does not mean that one may not switch from one belief to another which is incompatible with it. Changing one's mind is not an example of inconsistency; a person is inconsistent only when he holds two opposites at once, and under the same assumed conditions.
4. All pertinent evidence is scrutinized before conclusions are drawn. An investigator looks at all facts available, no matter how unpalatable some of them may seem. There is never a slanting, ignoring, or distortion of data to prove a point. Taboos and ungovernable prejudices do not mix with a reflective approach.

5. The ultimate authority for any conclusion is to be found in natural phenomena, as revealed by observation and experimentation. The subject matter of reflection is always rooted in nature.

6. All operations must be performed openly and in a fashion which will enable others to repeat the same procedures. Each act of reflection must be able to supply its own recipe, so to speak. Stated in another way, the methods of an investigator must be subject to operational description. We also use the term publically verifiable to describe the methods and the data of reflection. Finally, "if two hypotheses each account equally for all observed facts, the simpler one - that is, the one that makes the fewer assumptions - is to be preferred to the more complex."

The classroom teacher who plans to employ a reflective approach to education must be familiar with the above-mentioned steps and rules, as well as being adept at helping students to apply them in a meaningful manner. However, that alone is not enough. The process of inquiry is only one phase of reflective thinking, and it must be kept in its proper perspective.

During the 1960's and early 1970's inquiry became a byword in education in general, and in social studies
education in particular. Teachers were encouraged to employ a "problems approach" to their "subject-matter" and to then lead the student through the steps of the inquiry process in an attempt to find solutions. It was generally assumed that the student would "learn" as much "content" under this approach as he/she would have under a more traditional approach. More importantly, however, it was assumed that the student would become familiar with the steps and rules governing the use of the inquiry process, and that he/she would recognize that process as a means to approaching real-life problems outside of the school environment.

There now seems to be a general disenchantment among parents, students and teachers concerning the so-called "inquiry approach" to education. Parents who, with some justification, feel that their children are learning neither product nor process are demanding a movement "back to the basics" in ever increasing numbers. Students fail to see the value of a new approach to the same old subject-matter, and the assumption that they would somehow see a connection between inquiry and real-life problems has failed to prove itself warranted. Teachers have been dissatisfied with inquiry for a variety of reasons.

One group of teachers is opposed to an "inquiry approach" to education because the philosophy of experimentalism is antithetical to their personal and pedagogical
beliefs. These teachers prefer the relative safety and certainty of answers to the ambiguity and uncertainty of doubt. Another group of teachers, more sympathetic to experimentalism, has encountered difficulties of an external nature in trying to implement the "inquiry approach."

Examples of these types of difficulties include trying to escape traditional curricula, administrative resistance to change, parental dissent, student resistance, lack of materials, et cetera. Disenchantment with any efforts towards change is understandable and possibly even predictable for this group of teachers.

Yet, there is another group of teachers that neither finds experimentalism antithetical to personal and educational beliefs held, nor encounters great external difficulties, but which has still found the "inquiry approach" to be relatively nonproductive. The major reason for this is that inquiry, in general, has been approached from outside of the context of the total act of reflection. That is to say, teachers have attempted to get students to apply the process of inquiry to classroom problems, but they have not taken care to insure that the problems to which the process is to be applied are, in fact, perceived by the students as: (1) actual problems; and (2) problems worthy of investigation.

How does one go about having students perceive problems as worthy of investigation through the process of
inquiry? To answer such a question one must return to the total act of reflection. It was stated earlier that there are two phases or irreducible elements of reflective thinking: a state of doubt; and an act of inquiring. It was also pointed out that, through his choice of words, Dewey limited that which may be reflected upon to "belief(s) or supposed form(s) of knowledge." From the above two statements, it may be deduced that the state of doubt must involve or be centered upon some belief or supposed form of knowledge. It may further be deduced that because the act of inquiring is predicated upon a state of doubt, it too must involve or be centered upon some belief or supposed form of knowledge. Because the act of inquiry arises from a state of doubt, and because a state of doubt must necessarily center upon beliefs, it becomes quite clear that inquiry without beliefs is a non sequitur.

At the risk of belaboring a point, the relationship between beliefs, doubt and inquiry may be considered from another angle. Consider that the act of inquiry arises out of a state of doubt, but that as an act of commission it must be done to some-thing. Some-thing must be called into question. That thing which is inquired into is a belief or supposed form of knowledge.* Thus, the teacher

---

*The author believes that a strong case may be made for the synonymous usage of the terms "belief" and "supposed form of knowledge." Thus, for the sake of simplicity, the remainder of this work will refer only to beliefs.
who asks a student to consider a problem and employ the process of reflection without first insuring that at least one of the student's beliefs has been brought into question is, to use Griffin's words, "addressing the air or talking to himself..."6

Every student brings to school myriad beliefs. In order for reflective thinking to be a realizable goal for education, educators must recognize that those beliefs are the real subject-matter of reflection. They must abandon the idea of subject-matter as being what is printed in a textbook and come to accept it as what has already been imprinted in the student's mind. That subject-matter, those beliefs, are what must be brought to task, brought into question and put to the test of existing evidence.

A major problem for educators, then, who wish to employ a reflective approach in teaching is that of bringing to light or discovering what beliefs a student may hold. This precludes any attempt to create a state of doubt perceived by the student as worthy of exploration or investigation. Determining what beliefs a student may hold related to a given topic, issue, concept, et cetera, is the initial step towards a reflective approach to education. To disregard or attempt to by-pass that step is to rely upon one's fate and hope that the student will feel the need to engage in inquiry. Although it is not unlikely that some students may feel such a need, it is more probable that the majority
of students, because they care very little for the problem, will engage in inquiry only as an academic exercise (if one can convince them to engage in it at all), will not come away with any better understanding of the social sciences, and that they will fail to see the relevance of the process of inquiry to their lives. In short, what one may desire to achieve through employing an "inquiry approach" is likely to be negated because of a lack of interest.

CONCLUSION

When patterns of meaning and belief, developed apart from reflection, prove inadequate in the face of unusual or novel conditions, the failure of the individual to grow as a person is revealed. This is a shocking and tragic thing to observe in an individual. When it happens to a nation or society, catastrophe follows. In the face of a widespread breakdown individuals who are essentially still immature persons can but welcome a Fuehrer - a 'Big Brother' or father figure - to set things straight and tell them how to behave.

H. Gordon Hullfish and Phillip Smith

In the final analysis, if what is to transpire in the classroom is to be legitimately reflective then it must be the students' own beliefs which are called into question and the students' own problems -- relative to those beliefs -- to which the process of inquiry is ultimately applied.

This does not mean that those beliefs and problems cannot be related to customary social studies topics, issues or concepts. Neither does it mean that the teacher
should not nor cannot play an active or leading role in choosing the topics, issues or concepts which are to be studied. As John Dewey put it:

...It is then the business of the educator to see in what direction an experience is heading. There is no point in his being more mature if, instead of using his greater insight to help organize the conditions of the experience of the immature, he throws away his insight...

In short, it is the responsibility of the teacher to play a leading role in choosing an area of study, but it is also the teacher's responsibility to be sure that the area of study chosen corresponds closely enough with the students' past experiences to insure that the students hold some related beliefs which they value enough to investigate. If the teacher can choose an area of study about which the students hold valued beliefs, get the students to make commitments to those beliefs, and then cause the students to doubt those beliefs, the seeds of genuine reflection, and thus the need for inquiry, will have been sown.

One is always reluctant to present a series of ideas or techniques outside of the context of the philosophy in which they are meant to be employed. Because the writer believes that theory and practice should be inseparable, the emphasis of this chapter has been upon the development of the theoretical framework within which the techniques described later in this work are meant to be employed. The author realizes that, at best, the information contained
in this chapter comprises only a limited outline of the logical structure of the experimentalist position regarding theory of education. Therefore, it is suggested that those who may consider the use of the techniques described in this work become more thoroughly acquainted with the experimentalist position before attempting to employ a reflective approach in the classroom.
FOOTNOTES

CHAPTER II

1 Dewey, op. cit., How We Think, 9.
2 Griffin, op. cit., 171.
4 Hunt and Metcalf, op. cit., 60-61.
5 The Columbia Associates, op. cit., 53.
6 Griffin, op. cit., 177.
7 Dewey, op. cit., Experience and Education, 38.
CHAPTER III

REFLECTIVE THINKING AND VALUES EDUCATION

The most important problem of moral education in the school concerns the relationship of knowledge and conduct. −

John Dewey

One of the most pressing issues confronting contemporary social studies teachers is how values education or moral development should be approached in the classroom. This is not a new issue, to be sure. However, because of the more complex social and psychological demands of our technologically oriented society, and the resulting increased frequency of aberrant behavior in the community, it is an issue whose time has come. Leland and Mary Howe take note of the values crisis confronting modern society when they comment that:

Today, more and more people -- especially the young -- seem to be living their lives without clear purpose and direction, unable to decide what they are for or against. Bewildered by the choices that confront them daily, some withdraw and attempt to shut the confusion out. Some conform and become only too willing to let others tell them exactly what to believe and do. Still others lash out at the confusion, trying to smash anything that troubles them. ¹

Concerning the role of schools in this crisis, they concluded:
Unfortunately, the impersonal nature of many of our schools is not helping the situation. Students who lack values or who hold confused values, are likely to see no relevance in their lessons no matter what the teacher does. Thus, schools which continue to stress only academic goals are wasting their efforts, to say the least; in many cases, the schools may actually be serving to heighten the students' confusion regarding values.²

Assuming that the conclusions of these writers -- and dozens of others who concur -- are accurate, it seems clear that schools in general and social studies teachers in particular must come to grips with the problem of how to deal with values in the classroom. As Jack Fraenkel puts it:

Teaching is a value-oriented enterprise. The teaching of values, in fact, is unavoidable. All the activities in which teachers engage . . . suggest that they consider some ideas, events, individuals, and behaviors more important than others for students to consider.³

James Shaver and William Strong agree, observing that "the obvious point is that no curriculum is value free. Values and value implications are an inevitable part of instruction."⁴ They further assert that:

There is no use pretending that teachers can avoid such value related decisions. We must act, and our values will be a major influence in determining how we treat students. The danger again is in pretending that what we do is 'value free.' Such a pretense allows unexamined assumptions and biases to influence our behavior. And the impacts on our students will often be detrimental to the objectives that we consciously seek.⁵

Fraenkel extends this line of thought beyond the classroom with the observation that:
It is not just teaching that is value impregnated, however. So, too, are schools as a whole. . . . Values obviously permeate the 'formal' curriculum of the school . . . However, values also are part of the 'hidden' curriculum -- the experiences that are not planned and that often result in unintended and sometimes undesired student learnings.  

Of course, not all attempts to deal with values or moral education in the schools have been hidden, nor have they been intended to be so. Historically, there have been numerous approaches or methodologies employed in attempting to facilitate values education or moral development. The so-called "bag-of-virtues" approach attempted to inculcate a series of moral principles or personal traits through both learning activities and carefully selected materials. The citizenship approach stressed the rectitude of being loyal to one's country and acting as "good Americans" do. The modeling approach demanded that teachers adopt or conform to community standards so as to serve as models worthy of emulation by their students.

Each of these approaches had inherent problems which have been more-than-adequately exposed in the literature concerning values education. The consideration of those shortcomings is not within the parameters of this work. The philosophical underpinnings of those approaches are basically antithetical to those which this work endorses. However, there are two more recent approaches which are more closely associated with the experimentalist position and are,
therefore, germane to the substance of this dissertation.

Perhaps the most widely accepted approach to values education in schools today is known as values clarification. That approach was introduced in 1966 by Louis Raths, Merrill Harmin and Sidney Simon in a publication entitled *Values and Teaching*. In that work Raths et al. noted their concern for the growing number of people "... legion in our increasingly affluent society, [who] may well suffer from unclear sets of values." They further stated that:

Such persons seem not to have clear purposes, to know what they are for or against, to know where they are going and why. Persons with unclear values lack direction for their lives, lack criteria for choosing what to do with their time, their energy, their very being.

They suggested what is needed is a book for teachers which "... shows them how to work with others so as to help them clarify their own (the students') values." To that end, they made the claim that their work "... outlines a theory of values and a methodology for the clarification of values."

It cannot be denied that values clarification has had a considerable impact on American education. Neither can it be denied that much of that impact has been of a positive nature. This is especially so when values clarification is compared to earlier approaches to values education. Still, after more than a decade of use in the classroom and innumerable written works on the subject it must be questioned whether the
advocates of values clarification have yet to develop a "... theory of values and a methodology for the clarification of values." Indeed, after a review of the literature on the subject it seems that such is not the case. Values clarification as an approach to values education suffers from a variety of shortcomings.

First, although Raths and his associates claim that their approach is based upon a theory of values, it is difficult to find anything resembling a theory in values clarification literature. If one may take the word "theory" to mean "... a system of assumptions, accepted principles, and rules of procedure devised to analyze, predict, or otherwise explain the nature or behavior of a specified set of phenomena," a search of the literature will disclose nothing akin to a theory of values. As Jack Fraenkel -- one critic who provides numerous insights into the weaknesses of the values clarification approach -- has observed:

... at best, one finds only a few assumptions by the authors as to how values develop. These assumptions do not in any way help to explain why they develop this way. Nor do the assumptions predict how individuals with certain values are likely to act in a given situation. They don't tell what to do when values conflict or even how -- or if -- the holding of a particular value affects the development of other values. All these are considerations one might reasonably expect a theory of values to provide some ideas about.

Perhaps the closest values clarification advocates have come to establishing a theory of values is when Raths et al.
rather cautiously remark that "we do, however, have some ideas about what processes might be effective for obtaining values." They then proceed to define a process of valuing in lieu of a theory of values. The process they describe consists of seven steps, about which Raths and his associates state, "Unless something satisfies all seven of the criteria noted below, we do not call it a value." The seven criteria or steps involved in the process of valuing as described by the authors in their original work are:

1. Choosing freely.
2. Choosing from among alternatives.
3. Choosing after thoughtful consideration of the consequences of each alternative.
4. Prizing and cherishing the choice.
5. Affirming the choice publicly.
6. Acting upon the choice.
7. Repeating the choice.

Unfortunately for Raths and his followers, these seven criteria and the insistence that each must be met before it may be said that one holds a value have caused even further criticism of their theory of values. Difficult questions can and have been raised concerning their process of valuing. For example: What if one never has the opportunity to publicly affirm or act upon a value? How many times must a choice be repeated to be considered a value? What if a choice can be affirmed or acted upon only once, or twice? When two or more
choices that meet the criteria come into conflict with each other, is the one which is prized or cherished least not to be considered a value? Is valuing an either-or process, or are there degrees of valuing? Is it possible that two values that are in conflict with each other may be held at the same time because one may be valued a little more than the other? It is obvious that the list could go on. The point is, however, the criteria established in this process do little in the way of developing a theory of values that may be consistently used to "... analyze, predict, or otherwise explain the nature or behavior of a specified set of phenomena"\(^{17}\) in the real world.

A second major criticism of the values clarification approach is that despite the stated intentions of Raths and his associates there has yet to be developed any overall methodology for the clarification of values in the classroom. The use of the term "methodology" implies that there are specified steps or procedures that should occur in a sequential order to facilitate the clarification of individual values in a classroom setting. A search of the literature for any such procedures or any semblance of a sequential ordering has proven fruitless. At best, readers are provided with extensive lists of techniques or activities and counseled to put them to use. Raths and his co-writers state that "many readers will note the similarity between the value theory and certain approaches to critical thinking. In general, we might
say that we apply critical thinking techniques to matters that are largely in the affective domain."\textsuperscript{18}\ 18 Overlooking questions that might be raised concerning whether values are 
" . . . matters that are largely in the affective domain,"\textsuperscript{19}\ one must still wonder where it is that readers are instructed as to how to get students to " . . . apply critical thinking techniques."\textsuperscript{20}\ It is true that teachers are advised that they should have their students " . . . choose freely . . . from among alternatives . . . after thoughtful consideration of the consequences of each alternative,"\textsuperscript{21}\ while forming their values, but nowhere is a methodology described by which students may do so. One searches in vain for a methodology which teaches students how to define a problem, formally state a hypothesis, consider alternative sources of data, gather data, analyze and evaluate data, test a hypothesis in light of the data gathered or to formulate some concluding statement about a hypothesis and its relationship to the data. Thus, one must conclude that any parallels or similarities between the methodology of values clarification alluded to by Raths et al. and the methodology of critical thinking, inquiry or reflection remain either unstated or fictional.

This apparent lack of a methodology leads to what is probably the most severe weakness of the values clarification approach. As James Shaver and William Strong describe it, " . . . Raths and Simon clearly do not deal with a decision making process, but focus on one aspect -- clarifying one's
own commitments.\textsuperscript{22} Despite all the verbiage of values clar-
ification advocates concerning the process of valuing, the
exercises and techniques they recommend for classroom use
limit the students to one activity -- the clarification of
their personal values. Because these exercises require stu-
dents to go no further, there is an imminent danger that
clarification may come to be perceived as having value in and
of itself. The very name of the approach suggests that val-
ues clarification is possessed of some intrinsic value. Un-
fortunately, students may come away from such experiences be-
lieving that because they have achieved a particular objec-
tive, they have completed a process. Because clarification
is the end product of their experiences, what is likely to
evolve is an approach which reinforces clarification for the
sake of clarification.

The arguments just presented are not to suggest that
clarification is devoid of any value. On the contrary, in
contrast to clarification as an end, clarification as a
means to an end may be an activity that has a great deal of
value, albeit a value of a different nature. That is to say,
it may possess a great amount of instrumental value. There
is a parallel that might be drawn here to the case that has
been previously stated in this work regarding the relation-
ship between attitudes and beliefs. Only by first becoming
aware of what values one holds may one become aware of how
one came to hold those values, why one holds those values,
as well as the possible future consequences of holding those values. In this sense clarification may be taken to be an extremely valuable experience.

At this point a series of paradoxes concerning values clarification should be evident to the reader. The dichotomy created by the differences between the position values clarification advocates embrace and the activities they exhort teachers to use is inescapable. Values are equated with examined beliefs, yet values clarification exercises exclude the process of examination. A theory of values is alluded to and is likened to critical thinking, yet the role of empirical data is totally ignored. And finally, a methodology is advocated that stresses the process of valuing, yet the classroom activities that constitute that methodology disregard that very process in deference to a product that is valued of its own accord.

A more complex and sophisticated approach to values education or moral development has evolved from the work of Lawrence Kohlberg. A developmental psychologist, Kohlberg sought to extend the thinking of John Dewey and Jean Piaget, especially as related to moral judgment and children. Kohlberg hypothesized that moral judgment develops in human beings concomitant with cognitive development as described by Piaget. To test his hypothesis, Kohlberg initiated a series of empirical studies that recorded and classified the responses of various age groups to moral dilemmas that were
presented to them. From those studies came the theory of cognitive moral development. That theory stated that the ability to reason about matters related to morality develops through a series of three levels, each consisting of two stages. Kohlberg suggested that the levels and stages he identified were roughly equivalent to those first intuited by Dewey and later substantiated by Piaget. He remarked that "in 1955 I started to redefine and validate (through longitudinal and cross-cultural studies) the Dewey-Piaget levels and stages. . . . "\(^{24}\) Later he claimed " . . . to have validated the stages defined. . . ."\(^{25}\) Finally, he asserted that "the notion that stages can be validated by longitudinal study implies that the stages have definite empirical characteristics."\(^{26}\) The levels and stages Kohlberg claims to have validated are outlined below:

**Level One: The Preconventional Level**
At this level one's moral reasoning is based upon the physical or hedonistic consequences of one's actions. Important concepts are reward, punishment, power and exchange of favors.

**Stage One:** The physical consequences of one's actions determine the choices made. At this stage one is concerned with avoiding punishment or seeking rewards.

**Stage Two:** Often referred to as the reciprocity stage, decision making here is dependent upon what will satisfy one's own physical needs in return for satisfying the needs of others.

**Level Two: The Conventional Level**
At this level reasoning becomes less egocentric. Maintaining the expectations of one's family, group or nation becomes valuable in its own right,
regardless of immediate and obvious consequences. There is a desire to do what is "right" in accordance with the existing social order and to maintain that order. Important concepts include family, peer group, nation, social order, loyalty and maintainance.

Stage Three: The approval of others is the important determining factor at this stage of development. One pays particular attention to the expectations of the family, peer groups and society, and to fulfilling those expectations.

Stage Four: This is the law and order stage. Moral decisions hinge upon fixed rules, doing one's duty and demonstrating a respect for authority.

Level Three: The Postconventional Level
At this level there is a clear attempt to define moral values and principles. Moral reasoning relies more upon those values and principles and less upon the authority of a group or individual. Important concepts are social contract, individual rights, and universal-ethical-principles, including justice, equality and human dignity.

Stage Five: The relationship of the individual to society as defined by a social contract is the central factor in decision making at this stage. One tends to abide by the law, but reserves the right for society to change the law.

Stage Six: Decisions at this stage are based upon adherence to self-chosen ethical principles which are abstract and universal in nature. Among those principles are justice, the equality of human rights and respect for the dignity of human beings as individual persons.  

It is important to note that Kohlberg referred to the stages he identified as " . . . structures of moral judgment or moral reasoning," and that "structures of moral judgment must be distinguished from the content of moral judgment."
In other words, the stages described how the subjects reasoned as opposed to the content of their decisions. In regard to these structures, Kohlberg found that, except under conditions of extreme trauma, movement is always forward and invariant, and that stages cannot be skipped. In addition, he noted that advanced moral reasoning was dependent upon advanced logical reasoning, but does not necessarily follow advanced logical reasoning, and that exposure to reasoning from the next "higher" stage induced upward movement.

Since the time that the theory of cognitive moral development was initially advanced it has come under a substantial amount of criticism. Some have attacked the research methods employed by Kohlberg and the validity and reliability of his results, while others have chosen to reprove him for his philosophical biases. It is not the intent of this work to critique Kohlberg's theory. Whether or not Kohlberg's assertions are warranted is not the issue under consideration in this work. The significance of Kohlberg's findings as far as this dissertation is concerned lies in the manner to which they have been applied in the field of education.

During the early 1970's a teaching methodology began to evolve which focused upon Kohlberg's theory of cognitive moral development. The central element of that methodology was the moral discussion. According to Kohlberg, under the proper conditions such discussions could lead to a
"... reconstruction of role taking ... [which] occurs in order to achieve a better match between the child's own moral structures and the social and moral situations he confronts." He further noted that:

... the important conditions appeared to be:

1. Exposure to the next higher stage of reasoning.

2. Exposure to situations posing problems and contradictions for the child's current moral structure ... .

3. An atmosphere of interchange and dialogue combining the first two conditions, in which conflicting moral views are compared in an open manner.

Building upon those conditions, the Social Studies Curriculum Center at Carnegie-Mellon University and the Laboratory of Human Development at Harvard University began devising teaching strategies to promote moral development. In 1975, Ronald E. Galbraith and Thomas M. Jones described several teaching strategies designed at Carnegie-Mellon. The basic process embodied in each of those strategies consisted of four steps. The students first confront a moral dilemma introduced by the teacher. After considering the dilemma and clarifying the terminology used and the issue involved, each student is requested to state a position on the dilemma. Next, the students are urged to test their positions by comparing the reasoning they used with others in the class. Finally, each student is asked to consider all of the reasons advanced by members of the class and select the one that he or
she feels is the best response to the dilemma. 34

The rationale for these strategies comes directly from Kohlberg's research. Based upon Kohlberg's findings, Galbraith and Jones, along with Edwin Fenton and Barry Beyer, assumed that by being exposed to reasoning at a "higher" stage from other students in the class that individual students would recognize the superiority of that reasoning, gradually adopt it and move to the next "higher" stage. 35 In fairness, it should be reported that there are other sources of empirical evidence to support that assumption. 36 Despite that evidence, however, the methodology has one major shortcoming which is germane to the subject of this work.

Under close scrutiny it becomes apparent that there are distinct parallels between the teaching methodology designed to promote cognitive moral development and the process of reflective thinking. The students confront a dilemma (recognize a problem), clarify the terminology used and the issue involved (define the problem), take a position (form a hypothesis), test the reasoning behind their position (test the hypothesis) and decide upon the best response to the dilemma (form a conclusion). It should be observed, however, that there is one very significant difference. One will note that the method developed to promote moral development in the classroom excludes any mention of encouraging students to gather and consider data that may be applicable to the dilemma. When addressing themselves to the topic of testing the
reasoning supporting a given position taken on a dilemma, Galbraith and Jones state that "this is the most important step in the teaching process." Yet, one must wonder upon what bases the students are to test their reasoning if no attempt is made to gather any pertinent data.

The proponents of cognitive moral development suggest that students should "... test their reasoning against the thinking of others." This certainly sounds appealing and, in fact, there is a certain degree of benefit to be attained by engaging in such an activity. Nevertheless, it is an old axiom among classroom teachers that what generally results when that activity is carried to the extreme suggested here is what is commonly known as a "pooling of ignorance." This is not meant to be taken in a derogatory sense. The ideas and reasoning of others are certainly factors that are worthy of consideration when attempting to resolve any problem or dilemma, but they are not the only factors that should be considered. It is difficult to imagine any type of a dilemma, moral or otherwise, to which pertinent empirical data would not be of some benefit in the process of attempting to discover a resolution. To suggest or imply that students should warrant their beliefs upon the reasoning of others without examining the evidence that supports that reasoning is to impugn the very form of scientific investigation from which the theory of cognitive moral development has evolved.
To come to the point, it would appear that those who have developed the teaching methodology described to promote moral development have done nothing more than to re-invent Dewey, only not quite as well. It is apparent that the technique of employing a moral dilemma is equally as adaptable to the reflective process as it is to the model designed for moral development. However, the results obtained are not likely to be equally desirable. From the perspective of the experimentalist which this work embraces, the method that encourages students to actively pursue a variety of data when attempting to resolve problems related to morality or values is the method that is to be preferred. At the time of this writing, that method is reflective thinking.

CONCLUSION

The case has been presented that dealing with values is an inescapable part of education. The choice that teachers face is not whether to deal with values, but rather how values will be dealt with. Early attempts at dealing with values in the schools proved either ineffective or undesirable. More recent attempts which have roots in the experimentalist position, have also been found to have rather significant shortcomings. The values clarification approach lacks a fully developed theory as well as a comprehensive methodology for classroom application. The cognitive-developmental approach, well grounded in theory, essentially ignores the
use of research and empirical data when applied in the classroom. While both approaches ask students to consider the consequences of holding particular values, neither approach encourages the students to make any attempt to warrant what they choose to value in light of existing empirical evidence. This is a serious mistake.

It is a common fallacy to assume that empirical data cannot be applied to matters related to values. Yet, for the most part things are valued or value judgments are made on the basis of underlying beliefs. Jerrold R. Coombs asserts that:

One of the most significant points to note is that it is always relevant to ask for justification of value judgments. That is, it is never beside the point to ask for reasons or grounds for the judgment. If someone asserts that racism is bad, it is relevant to ask why it is bad or what makes it bad. . . . A full specification of the reasons for any value judgment contains both facts about the thing being evaluated and rules or criteria which relate the facts to the rating. A person making an evaluation commits himself to having supporting facts because value judgments are logically dependent to a degree on factual considerations.39

In light of this observation, it seems apparent that a methodology which asks students to make use of the empirical evidence available, in addition to considering the consequences of holding a certain value is the method which is to be preferred when trying to get students to think about values. Thus, reflective thinking is to be preferred to the previously mentioned methods as an approach to values education.
FOOTNOTES

CHAPTER III


2 Ibid., 17-18.


5 Ibid., 6.

6 Fraenkel, op. cit., 2.

7 Louis Raths, Merrill Harmin and Sidney Simon, Values and Teaching (Columbus, Ohio: Charles E. Merrill Co., 1966) 12.

8 Ibid., 12.

9 Ibid., 12.

10 Ibid., 12.

11 Ibid., 12.


13 Fraenkel, op. cit., 43.

14 Raths, op. cit., 28.

15 Ibid., 28.

16 Ibid., 28-29.

17 Morris, op. cit., 1335.
20. Ibid., 8.
21. Ibid., 28-29.
25. Ibid., 670.
26. Ibid., 670.
27. For the original text see Ibid., 671.
28. Ibid., 671.
29. Ibid., 671.
32. Kohlberg, op. cit., 675.
33. Ibid., 675.
38 Ibid., 20.
CHAPTER IV

TECHNIQUES FOR THE INITIATION OF REFLECTIVE THOUGHT IN THE SOCIAL STUDIES CLASSROOM

A good deal of disagreement exists among educators concerning the definition and usage of the term "technique." Such is especially the case when that term is used in conjunction with, or in opposition to the related terms "method," "strategy" and "approach." Few can agree on what each term means, how each should be used or where each might be placed in a hierarchical ordering. It is not one of the goals of this work to decide those issues. Nevertheless, it is important to the meaning of this chapter that the reader is cognizant of where the writer stands. Indeed, it is imperative that the reader understands what the writer means when he uses the term "technique." The writer does not ask the reader to accept, without reservations, the writer's definition. It is only requested that the reader allow the writer to describe how that term will be used in this chapter so that effective communication may be facilitated.

"Technique" as used in this work may be defined as a one-time, short-term activity used by a teacher while
engaging students in a broader method, strategy or approach to education. Techniques are the daily or day-to-day activities employed once a method, strategy or approach has been decided upon. In a sense, they are activities of a neutral class. That is to say that their utility is not limited to only one method, strategy or approach. To illustrate this point, reflection and indoctrination are considered by many to be antithetical approaches to education, yet, any number of techniques may be appropriate at a given time for either. Conversely, there may be a variety of techniques which could effectively bring about similar results within a given method, strategy or approach to education. It is, of course, one of the teacher's primary responsibilities to determine which technique may be most effective in a given situation considering the objectives, the materials available and the abilities of the students.

The techniques described in this chapter are presented for consideration in the generic sense. Examples of each technique will be provided for purposes of further elucidation, but they are meant to be taken only as examples. It is not the intent of the writer that any teacher, while attempting to employ one or more of the techniques described, should be limited to the particular content of the examples furnished. It is hoped that once given specific models, teachers would be able to design their own materials to suit their individual classroom needs.
It should also be pointed out that because these techniques are to be considered in a generic sense, the reader will notice that none of them is really new or original. The examples given are, to the best of the writer's knowledge, original, but the techniques themselves have been used for years in social studies classrooms.

What, then, the reader may ask makes this work unique? What makes it more than an extended rehash of time-worn classroom practices? The answer is that although the techniques described in this work are not new or original, the writer believes that this work does offer a new perspective on the use of those techniques. That perspective is based upon the instrumental relationship between beliefs, reflective thinking and the nature of the techniques described.

Viewed as separate entities, these techniques appear to have little in common other than that they are frequently used, students generally enjoy them (at least more than "regular" school activities) and that they usually promote more participation. Yet a closer examination of the nature of these techniques reveals a commonality shared among them of a far greater degree of importance. They each share the potential for inducing students to express their beliefs in the classroom. That realization, when coupled with the instrumental relationship between beliefs and reflection, provides a new perspective on the use of the techniques
described. No longer need they be viewed as a group of unrelated activities to be employed when the class becomes restless or when the teacher feels "innovative." Instead, they may be perceived as an integral component of a systematic approach to reflective thinking in the classroom. That perspective may offer the initial insight into the question posed earlier in this work, "How may secondary social studies teachers stimulate students to engage in reflective thinking?" If one recognizes that each of the techniques described shares a common propensity to induce students to express their beliefs, and if one is cognizant of the relationship between the act of stating beliefs and the total act of reflection, then the potential of these techniques for putting the theory of reflection into practice in the classroom should be evident.

In the remainder of this chapter the reader will be introduced to a number of techniques which the writer has identified as being particularly useful for initiating reflective thinking in the classroom. They were chosen for purposes of illustration. Those techniques identified are not meant to be taken as a comprehensive listing of such techniques. The writer realizes that there are many more techniques which have the potential to encourage students to express their beliefs than the few which are listed in this chapter. However, to attempt to describe each of them would be an exercise possessed of diminishing value, as well as one
of futility. To attempt to describe more than the number identified in this chapter would be to belabor the point of the work. Suffice it to say that a number of techniques were chosen which the author believes characterizes the total number of those techniques which might be used to initiate reflection. In short, they are representative.

For those readers who may have any doubts concerning the propensity of the techniques identified to facilitate the expression of beliefs in the classroom, the writer has included a number of student responses to those techniques. The students who responded were members of secondary social studies classes, ranging from the ninth through the twelfth grades, in racially mixed, middle-class high schools. Readers are invited to examine the responses of those students and to evaluate the effectiveness of the techniques illustrated. At the same time, readers might consider differences between the beliefs of the students, or inconsistencies in the beliefs of individual students, and project the possibilities of making use of those differences or inconsistencies to create the state of doubt or uncertainty that is the progenitor of the act of inquiry.

TECHNIQUE NUMBER ONE: THE MORAL DILEMMA

The moral dilemma has been chosen as the first of the techniques to be considered because it has already been discussed to some extent in chapter three. It may be recalled
that the moral dilemma was the technique employed by the Social Studies Curriculum Center at Carnegie-Mellon University to promote Lawrence Kohlberg's theory of cognitive moral development. The writer has already expressed his reservations regarding that theory. However, it is believed that the moral dilemma may be valuable as an instrument for promoting reflection in the classroom.

A moral dilemma is a story or situation that presents some character or group of characters with a problem regarding the rightness or wrongness of possible alternative actions. The Carnegie-Mellon strategy that centered upon the use of moral dilemmas was limited to a single means of teacher presentation and student response. Such need not be the case however. There are a number of workable variations. The one that has been chosen for this work is the advice letter. Others might take such forms as letters to the editor, letters to Congressmen, editorials, editorial replies, letters to famous people (living or dead), et cetera.

The advice letter is similar to the Ann Landers or Dear Abby columns found in many daily newspapers. The students are given copies of a letter and asked to respond in writing. The teacher may collect the responses and read them later, in private, or ask for volunteers to read their responses aloud to the class, or conduct a class discussion to determine what beliefs the students may hold related to the topic of the letter.
In the following example, which might be used in an American history, American government or economics class, students were asked to express their beliefs regarding a citizen's obligation to pay the government income tax. The reader is invited to look for cases of internal inconsistencies or of conflicting beliefs stated by different students. For example, student number one takes the position that cheating and lying are bad, but goes on to make the case that not paying one's taxes is neither cheating nor lying and, therefore, permissible. This student's response alone could lead to an excellent discussion and subsequent exploration of the fiscal responsibilities of citizenry in a republic if the student were pressed to defend the position taken. Presumably, the same thing could be accomplished by examining the conflicting beliefs of two or more students regarding this problem. In any case, it is not difficult to see how data from the fields of history, political science and economics could be brought to bear on the situation.
A TAXING PROBLEM

Instructions: Please respond to the following letter with several paragraphs advising the writer what to do and why. Consider your answer carefully and include as many reasons as you can to support the advice that you give.

Dear Gabby,

I am a sixteen year old high school student with a problem. I plan to go to college after I graduate from high school, but I must pay my own way. In order to have spending money now and to pay my tuition then, I work part-time during the school year and full-time in the summer for a friend of my father. Because my employer is a family friend he always pays me in cash without taking out any deductions for tax. I make several thousand dollars a year at this job and I know that legally I should be paying state and federal income tax.

I have discussed this with my father and he says that I am crazy to even be considering paying taxes on the money that I earn. According to him, cheating the tax collector is the national sport. Everybody does it and those that do it best are the big winners in life. The object of the game is to keep what you have earned and the risk involved is getting caught. My father says that there is no chance that I can get caught because his friend doesn't declare my earnings as a business expense on his tax return. Besides, the IRS doesn't mess around with such small cases and even if they did they don't know that I exist since I've never filed a tax return.

In addition to what my father says, I have some reservations of my own about paying income tax. I frequently do not agree with the way the government makes use of the tax money that is collected. Because I am not yet old enough to vote, I have no voice in the matter. Wouldn't that be taxation without representation? Equally as disturbing is the fact that I am not represented among those that write the tax laws. Each year there is a published list of millionaires who legally pay no taxes because of the way the laws are written. Why should I be expected to pay taxes from what little bit I earn while these people have more than they could ever spend and pay nothing?

What do you think I should do? I am, At a (tax)loss.
A Taxing Problem

Dear 'at a tax lawd',

I can understand your feelings about not having a voice in a situation because of your age, it is frustrating, but you can use these years to learn as much as possible about our government, its laws and its taxes. When you are a little older, you will have some knowledge of how you feel and you can then do something about it. As far as your father's position on the national sport of cheating the tax collector, I seem to disagree. Being a tax dodger makes a winner out of you.

In your case, not paying taxes, you are cheating anyone and you are not winning. If you were good, I would continue to receive your untaxed money and not feel guilty. I am sure that government isn't free to choose if they don't receive a few hundred dollars from you. In the future, same as you will be paying your fair share of taxes just like everyone else.
Student Number Two.

Dear loss,

Everyone does not cheat on their income tax but most do. It's obvious that you will need a great amount of money to meet your goals so you have to keep your job to reach it. I say as long as you haven't filed a return, there are very few ways of it being caught so, just sit back and think of the money you are not paying to the govt.

Student Number Three.

Dear one (tax) less

I think the best thing for you to do is to quit this job or tell your boss that he should take out the taxes. If you should decide to quit the job you can always find another one that will take out your taxes.

Gobby
Student Number Four.

Dear Ross,

I understand your difficulty in deciding what you should do. Personally I'd say you should play a game and enjoy it. When you're through, you'll be satisfied. Except that in terms of worrying about it, there are thousands of young men and women in your position. On the other hand, if you think it's wrong, then hide a tax form if you so desire. Sincerely yours, Gabley.

Student Number Five.

I suggest you write to your Congressmen or women and tell them how you feel. I mean about the taxes at least. I cannot tell you to "cheat" the tax collector but disagree with you about how unfair it is. If we tell our readers to write to an Congressman, we just might get a response.
Dear at a Loss,

You know that taxes pay for government services such as police protection, fire protection, welfare, public schools, parks, roads, etc. Even though you do not yet have the right to voice your opinion about where your tax dollar should be spent, you are affected and aided by government services every day.

I agree that it is wrong for very wealthy people to pay no taxes through loopholes, but you are committing the same crime as they are, albeit on a smaller scale. Although your father is probably right when he says it is unlikely that you will be caught, you should consider the fairness of taking advantage of government services every day without paying a cent.

Daddy
Student Number Seven.

I would just keep accepting
the cash, pay my way through
school on it and don't worry
about the IRS.

Student Number Eight.

Dear At a Tax Loss,

I think you have the right to feel
guilty about not paying taxes. In this
great country of ours there are certain
responsibilities we must live up to. One
of which is paying taxes. Your father
and your employer are both wrong.
You yourself were complaining about
the millionaires who don't pay taxes.
What right do you have to complain
when you are doing the same thing.
There are many things in this life we
dislike but nevertheless we must live
by them. Be honest not only with
yourself but also with others.

Gabby
Student Number Nine.

Dear person: The way I see it you have two options, one pay your fair share of the taxes or let other people pay your way. I know that is a hard question but if you want to be an adult you are going to make decisions like this all the time. Do what you think is right!

Gobby

P.S. I personally would not pay the taxes.

Student Number Ten.

I think you should keep on with the way you are doing business right now. You need the money to get a college education and when you are out of school and working you will be paying your taxes. Don't pay the taxes.
Student Number Eleven.

If I were you, I wouldn't pay tax at all. Because your father's friend — your employer — didn't declare your earnings as a business, decide, the IRS didn't know about you care?

And, in a personal point of view, you're not old enough to vote, don't have chance to take part in government matters, don't have (can't have) political voices —

You're working as a part-time job, not as a business. You don't have to pay money, I think. I suggest, instead of thinking of this kind of problem, you have to consider — and think about your college. Why you can afford to think about that kind thing, instead of thinking about your future? Please think about that kind of problem after you enter college.

Student Number Twelve.

Dear Loss,

I feel that it is everyone's duty to pay taxes so I would go to the IRS office and get the tax forms and also ask your father's friend to start paying you in checks so you have a receipt so you know exactly how much money you've made since working there, then start filling out your tax forms. Not all the big winners in life dodge taxes.
Student Number Thirteen.

Dear Alice,

Keep the money because if you were taxed on it and you liked it, most of the money would still be refunded anyway.

Gaby

Student Number Fourteen.

Dear at a tax loss,

I realize your misgivings about the way our income tax systems work and I think you may have some good points, but as a citizen of the United States, you have a responsibility to your country and your fellow citizens. If everybody who decided they didn't agree with a law ignored it, what kind of chaos do you think we would have? Although many practices in the tax system may not be right, the fact still remains that the government needs money to function and it has chosen this way in which to obtain that money. Your duty, as a citizen of this country, is to do your best to improve the system or find a new way to replace the old. If you feel strongly enough about your positions, maybe you could get into politics and try to change things. If not, you should keep on learning all you can about the facts and the problems of the system and when you do get to participate in the vote, you will be prepared to cast your vote for the candidates that support your positions.

Gaby.
TECHNIQUE NUMBER TWO: THE QUESTIONNAIRE

The questionnaire is probably the most direct means available for the teacher to discover what beliefs the students in a class may hold concerning a given topic or issue. The writer has seen this activity employed by numerous student teachers and almost always with great success. There is a variety of types of questionnaires which the teacher may utilize in the classroom, however, it is important that the teacher become aware of the advantages and disadvantages of each before attempting to construct or evaluate items. Below are some examples of various types of questionnaires.

I. Checklists or Inventories

Checklists or inventories are lists of items which are usually related to a given topic. The students are asked to respond to the items in a forced choice manner. Typical responses are of the good-bad or yes-no variety. Checklists or inventories tend to be rather crude measuring devices because they fail to measure the intensity of given responses. They do however, appear to have a good degree of reliability when used with related items because the emphasis is upon a block as opposed to single items. The following is an example of an inventory or checklist which the social studies teacher might employ in a questionnaire.
Instructions: Please read the following list and place an X beside those items you believe to be accurate and an O beside those items you believe to be inaccurate.

- 1. Most people on welfare are there because they are lazy.

- 2. A capitalist economic system provides equal opportunities for all classes.

- 3. Most people on welfare are there because they are just victims of unfortunate circumstances.

- 4. Most people on welfare are trying to cheat the system.

- 5. Most people on welfare are victims of a capitalist economic system.

- 6. Most people on welfare receive more than they deserve.

- 7. Most people on welfare wouldn't work if they had the chance.

- 8. Many people on welfare would like to work, but they can't find employment.

- 9. Many people on welfare would like to work, but they aren't able to.

- 10. People on welfare have it made because they get paid for not working.
Student Number Two.

Instructions: Please read the following list and place an X beside those items you believe to be accurate and an O beside those items you believe to be inaccurate.

O 1. Most people on welfare are there because they are lazy.

✓ 2. A capitalist economic system provides equal opportunities for all classes.

X 3. Most people on welfare are there because they are just victims of unfortunate circumstances.

X 4. Most people on welfare are trying to cheat the system.

O 5. Most people on welfare are victims of a capitalist economic system.

O 6. Most people on welfare receive more than they deserve.

X 7. Most people on welfare wouldn't work if they had the chance.

X 8. Many people on welfare would like to work, but they can't find employment.

X 9. Many people on welfare would like to work, but they aren't able to.

O 10. People on welfare have it made because they get paid for not working.
Student Number Three.

Instructions: Please read the following list and place an X beside those items you believe to be accurate and an O beside those items you believe to be inaccurate.

O 1. Most people on welfare are there because they are lazy.

X 2. A capitalist economic system provides equal opportunities for all classes.

X 3. Most people on welfare are there because they are just victims of unfortunate circumstances.

O 4. Most people on welfare are trying to cheat the system.

X 5. Most people on welfare are victims of a capitalist economic system.

O 6. Most people on welfare receive more than they deserve.

O 7. Most people on welfare wouldn't work if they had the chance.

O 8. Many people on welfare would like to work, but they can't find employment.

O 9. Many people on welfare would like to work, but they aren't able to.

O 10. People on welfare have it made because they get paid for not working.
Student Number Four.

Instructions: Please read the following list and place an X beside those items you believe to be accurate and an O beside those items you believe to be inaccurate.

〇 1. Most people on welfare are there because they are lazy.

〇 2. A capitalist economic system provides equal opportunities for all classes.

〇 3. Most people on welfare are there because they are just victims of unfortunate circumstances.

〇 4. Most people on welfare are trying to cheat the system.

〇 5. Most people on welfare are victims of a capitalist economic system.

〇 6. Most people on welfare receive more than they deserve.

〇 7. Most people on welfare wouldn't work if they had the chance.

〇 8. Many people on welfare would like to work, but they can't find employment.

〇 9. Many people on welfare would like to work, but they aren't able to.

〇 10. People on welfare have it made because they get paid for not working.
Student Number Five.

Instructions: Please read the following list and place an X beside those items you believe to be accurate and an O beside those items you believe to be inaccurate.

O 1. Most people on welfare are there because they are lazy.

O 2. A capitalist economic system provides equal opportunities for all classes.

X 3. Most people on welfare are there because they are just victims of unfortunate circumstances.

O 4. Most people on welfare are trying to cheat the system.

O 5. Most people on welfare are victims of a capitalist economic system.

O 6. Most people on welfare receive more than they deserve.

O 7. Most people on welfare wouldn't work if they had the chance.

X 8. Many people on welfare would like to work, but they can't find employment.

X 9. Many people on welfare would like to work, but they aren't able to.

O 10. People on welfare have it made because they get paid for not working.
Student Number Six.

Instructions: Please read the following list and place an X beside those items you believe to be accurate and an O beside those items you believe to be inaccurate.

X 1. Most people on welfare are there because they are lazy.

X 2. A capitalist economic system provides equal opportunities for all classes.

O 3. Most people on welfare are there because they are just victims of unfortunate circumstances.

X 4. Most people on welfare are trying to cheat the system.

O 5. Most people on welfare are victims of a capitalist economic system.

O 6. Most people on welfare receive more than they deserve.

X 7. Most people on welfare wouldn't work if they had the chance.

O 8. Many people on welfare would like to work, but they can't find employment.

O 9. Many people on welfare would like to work, but they aren't able to.

O 10. People on welfare have it made because they get paid for not working.
Student Number Seven.

Instructions: Please read the following list and place an X beside those items you believe to be accurate and an O beside those items you believe to be inaccurate.

X 1. Most people on welfare are there because they are lazy.

X 2. A capitalist economic system provides equal opportunities for all classes.

O 3. Most people on welfare are there because they are just victims of unfortunate circumstances.

X 4. Most people on welfare are trying to cheat the system.

O 5. Most people on welfare are victims of a capitalist economic system.

X 6. Most people on welfare receive more than they deserve.

X 7. Most people on welfare wouldn't work if they had the chance.

O 8. Many people on welfare would like to work, but they can't find employment.

O 9. Many people on welfare would like to work, but they aren't able to.

X 10. People on welfare have it made because they get paid for not working.
Student Number Eight.

Instructions: Please read the following list and place an X beside those items you believe to be accurate and an O beside those items you believe to be inaccurate.

X 1. Most people on welfare are there because they are lazy.

O 2. A capitalist economic system provides equal opportunities for all classes.

X 3. Most people on welfare are there because they are just victims of unfortunate circumstances.

X 4. Most people on welfare are trying to cheat the system.

O 5. Most people on welfare are victims of a capitalist economic system.

X 6. Most people on welfare receive more than they deserve.

X 7. Most people on welfare wouldn't work if they had the chance.

O 8. Many people on welfare would like to work, but they can't find employment.

X 9. Many people on welfare would like to work, but they aren't able to.

X 10. People on welfare have it made because they get paid for not working.
Student Number Nine.

Instructions: Please read the following list and place an X beside those items you believe to be accurate and an O beside those items you believe to be inaccurate.

X 1. Most people on welfare are there because they are lazy.

X 2. A capitalist economic system provides equal opportunities for all classes.

O 3. Most people on welfare are there because they are just victims of unfortunate circumstances.

X 4. Most people on welfare are trying to cheat the system.

O 5. Most people on welfare are victims of a capitalist economic system.

X 6. Most people on welfare receive more than they deserve.

X 7. Most people on welfare wouldn't work if they had the chance.

O 8. Many people on welfare would like to work, but they can't find employment.

O 9. Many people on welfare would like to work, but they aren't able to.

X 10. People on welfare have it made because they get paid for not working.
Student Number Ten.

Instructions: Please read the following list and place an X beside those items you believe to be accurate and an O beside those items you believe to be inaccurate.

X 1. Most people on welfare are there because they are lazy.

O 2. A capitalist economic system provides equal opportunities for all classes.

O 3. Most people on welfare are there because they are just victims of unfortunate circumstances.

X 4. Most people on welfare are trying to cheat the system.

O 5. Most people on welfare are victims of a capitalist economic system.

X 6. Most people on welfare receive more than they deserve.

X 7. Most people on welfare wouldn't work if they had the chance.

O 8. Many people on welfare would like to work, but they can't find employment.

X O 9. Many people on welfare would like to work, but they aren't able to.

X 10. People on welfare have it made because they get paid for not working.
II. Ratings

A rating type of questionnaire asks the students to assign numerical values to given items. One advantage of using a rating system as opposed to checklists or inventories is that the teacher and the students are able to determine the intensity with which a belief is held. Perhaps the most popular or well known type of rating is the Likert scale. This system allows the respondent five possible choices ranging from strong approval or agreement to strong disapproval or disagreement along with a neutral alternative. A questionnaire utilizing the Likert scale would look something like the following.
Student Number One.

Instructions: Please circle the response which is most similar to your belief for each of the following items. SA=Strongly Agree, A=Agree, N=No Belief, D=Disagree and SD=Strongly Disagree

SA A N D SD 1. Marriage should be a "forever" commitment.

SA A N D SD 2. Two people who are not happy together should stay married anyway.

SA A N D SD 3. People who have young children should not be allowed to get divorced.

SA N D SD 4. In this country it is too easy to get a divorce.

SA A N D SD 5. In this country it is too easy for people to get married.

SA A N D SD 6. Marriage agreements should be written in the form of legal contracts.

SA A N D SD 7. People should live together for a while before they get married to see if they are compatible.

SA A N D SD 8. Marriage is a bad thing.

SA A N D SD 9. If divorces were harder to get people would try harder to make marriages work.

SA A N D SD 10. Divorce is a bad thing.
Student Number Two.

Instructions: Please circle the response which is most similar to your belief for each of the following items. SA=Strongly Agree, A=Agree, N=No Belief, D=Disagree and SD=Strongly Disagree

SA A N D SD 1. Marriage should be a "forever" commitment.

SA A N D SD 2. Two people who are not happy together should stay married anyway.

SA A N D SD 3. People who have young children should not be allowed to get divorced.

SA A N D SD 4. In this country it is too easy to get a divorce.

SA A N D SD 5. In this country it is too easy for people to get married.

SA A N D SD 6. Marriage agreements should be written in the form of legal contracts.

SA A N D SD 7. People should live together for a while before they get married to see if they are compatible.

SA A N D SD 8. Marriage is a bad thing.

SA A N D SD 9. If divorces were harder to get people would try harder to make marriages work.

SA A N D SD 10. Divorce is a bad thing.
Student Number Three.

Instructions: Please circle the response which is most similar to your belief for each of the following items. SA=Strongly Agree, A=Agree, N=No Belief, D=Disagree and SD=Strongly Disagree

SA A N D SD 1. Marriage should be a "forever" commitment.

SA A N D SD 2. Two people who are not happy together should stay married anyway.

SA A N D SD 3. People who have young children should not be allowed to get divorced.

SA A N D SD 4. In this country it is too easy to get a divorce.

SA A N D SD 5. In this country it is too easy for people to get married.

SA A N D SD 6. Marriage agreements should be written in the form of legal contracts.

SA A N D SD 7. People should live together for a while before they get married to see if they are compatible.

SA A N D SD 8. Marriage is a bad thing.

SA A N D SD 9. If divorces were harder to get people would try harder to make marriages work.

SA A N D SD 10. Divorce is a bad thing.
Student Number Four.

Instructions: Please circle the response which is most similar to your belief for each of the following items. SA=Strongly Agree, A=Agree, N=No Belief, D=Disagree and SD=Strongly Disagree

1. Marriage should be a "forever" commitment.  
   - (SA) A N D SD

2. Two people who are not happy together should stay married anyway.  
   - (SA) A N D SD

3. People who have young children should not be allowed to get divorced.  
   - (SA) A N D SD

4. In this country it is too easy to get a divorce.  
   - (SA) A N D SD

5. In this country it is too easy for people to get married.  
   - (SA) A N D SD

6. Marriage agreements should be written in the form of legal contracts.  
   - (SA) A N D SD

7. People should live together for a while before they get married to see if they are compatible.  
   - (SA) A N D SD

8. Marriage is a bad thing.  
   - (SA) A N D SD

9. If divorces were harder to get people would try harder to make marriages work.  
   - (SA) A N D SD

10. Divorce is a bad thing.  
    - (SA) A N D SD
Student Number Five.

Instructions: Please circle the response which is most similar to your belief for each of the following items. SA=Strongly Agree, A=Agree, N=No Belief, D=Disagree and SD=Strongly Disagree

SA A N D SD 1. Marriage should be a "forever" commitment.

SA A N D SD 2. Two people who are not happy together should stay married anyway.

SA A N D SD 3. People who have young children should not be allowed to get divorced.

SA A N D SD 4. In this country it is too easy to get a divorce.

SA A N D SD 5. In this country it is too easy for people to get married.

SA A N D D 6. Marriage agreements should be written in the form of legal contracts.

SA A N D SD 7. People should live together for a while before they get married to see if they are compatible.

SA A N D SD 8. Marriage is a bad thing.

SA A N D SD 9. If divorces were harder to get people would try harder to make marriages work.

SA A N D SD 10. Divorce is a bad thing.
Student Number Six.

Instructions: Please circle the response which is most similar to your belief for each of the following items. SA=Strongly Agree, A=Agree, N=No Belief, D=Disagree and SD=Strongly Disagree

SA A N D SD 1. Marriage should be a "forever" commitment.

SA A N D SD 2. Two people who are not happy together should stay married anyway.

SA A N D SD 3. People who have young children should not be allowed to get divorced.

SA A N D SD 4. In this country it is too easy to get a divorce.

SA A N D SD 5. In this country it is too easy for people to get married.

SA A N D SD 6. Marriage agreements should be written in the form of legal contracts.

SA A N D SD 7. People should live together for a while before they get married to see if they are compatible.

SA A N D SD 8. Marriage is a bad thing.

SA A N D SD 9. If divorces were harder to get people would try harder to make marriages work.

SA A N D SD 10. Divorce is a bad thing.
Another popular type of rating system is known as the semantic differential. This method asks the students to rate one or more characters or items on the basis of a variety of given characteristics. The characteristics are provided in the form of bipolar adjectives with seven intermediate alternatives for response. Below are some sample items from a questionnaire utilizing the semantic differential.
Student Number One.

Instructions: One of the most publicized Presidents in American history was John F. Kennedy. It is now difficult to separate the man from the myth. Below is a list of characteristics and their opposites. In between each are seven blank spaces. Please place an X in the space along each line which most represents your beliefs about President Kennedy for each of the characteristics.

Intelligent: __: √: __: __: __: __: __: __: Stupid

Optimistic: __: __: __: __: __: √: __: __: Pessimistic

Trustworthy: __: __: __: __: __: __: __: Untrustworthy

Popular: √: __: __: __: __: __: __: Unpopular

Honest: __: __: __: __: __: __: √: __: Deceitful

Strong: __: √: __: __: __: __: __: Weak

Capable: __: √: __: __: __: __: __: Incapable

Cautious: __: __: __: __: __: √: __: __: Careless

Clever: __: √: __: __: __: __: __: Dull

Good guy: __: __: __: __: √: __: __: Bad guy
Student Number Two.

Instructions: One of the most publicized Presidents in American history was John F. Kennedy. It is now difficult to separate the man from the myth. Below is a list of characteristics and their opposites. In between each are seven blank spaces. Please place an X in the space along each line which most represents your beliefs about President Kennedy for each of the characteristics.


Student Number Three.

Instructions: One of the most publicized Presidents in American history was John F. Kennedy. It is now difficult to separate the man from the myth. Below is a list of characteristics and their opposites. In between each are seven blank spaces. Please place an X in the space along each line which most represents your beliefs about President Kennedy for each of the characteristics.

Intelligent: ___:___:___:___:___:___:Stupid

Optimistic: ___:___:___:___:___:___:Pessimistic

Trustworthy: ___:___:___:___:___:___:Untrustworthy

Popular: ___:___:___:___:___:___:Unpopular

Honest: ___:___:___:___:___:___:Deceitful

Strong: ___:___:___:___:___:___:Weak

Capable: ___:___:___:___:___:___:Incapable

Cautious: ___:___:___:___:___:___:Careless

Clever: ___:___:___:___:___:___:Dull

Good guy: ___:___:___:___:___:___:Bad guy
Student Number Four.

Instructions: One of the most publicized Presidents in American history was John F. Kennedy. It is now difficult to separate the man from the myth. Below is a list of characteristics and their opposites. In between each are seven blank spaces. Please place an X in the space along each line which most represents your beliefs about President Kennedy for each of the characteristics.

Intelligent: ___: ___: ___: ___: ___: ___: Stupid

Optimistic: ___: ___: ___: ___: ___: ___: Pessimistic

Trustworthy: ___: ___: ___: ___: ___: ___: Untrustworthy

Popular: ___: ___: ___: ___: ___: ___: Unpopular

Honest: ___: ___: ___: ___: ___: ___: Deceitful

Strong: ___: ___: ___: ___: ___: ___: Weak

Capable: ___: ___: ___: ___: ___: ___: Incapable

Cautious: ___: ___: ___: ___: ___: ___: Careless

Clever: ___: ___: ___: ___: ___: ___: Dull

Good guy: ___: ___: ___: ___: ___: ___: Bad guy
Student Number Five.

Instructions: One of the most publicized Presidents in American history was John F. Kennedy. It is now difficult to separate the man from the myth. Below is a list of characteristics and their opposites. In between each are seven blank spaces. Please place an X in the space along each line which most represents your beliefs about President Kennedy for each of the characteristics.

Intelligent:____:____:____:____:____:____:Stupid

Optimistic:____:____:____:____:____:____:Pessimistic

Trustworthy:____:____:____:____:____:____:Untrustworthy

Popular:____:____:____:____:____:____:Unpopular

Honest:____:____:____:____:____:____:Deceitful

Strong:____:____:____:____:____:____:Weak

Capable:____:____:____:____:____:____:Incapable

Cautious:____:____:____:____:____:____:Careless

Clever:____:____:____:____:____:____:Dull

Good guy:____:____:____:____:____:____:Bad guy
Student Number Six.

Instructions: One of the most publicized Presidents in American history was John F. Kennedy. It is now difficult to separate the man from the myth. Below is a list of characteristics and their opposites. In between each are seven blank spaces. Please place an X in the space along each line which most represents your beliefs about President Kennedy for each of the characteristics.

Intelligent: \( \Box \):____:____:____:____:____:____:Stupid

Optimistic:____:\( \Box \):____:____:____:____:____:Pessimistic

Trustworthy:____:____:\( \Box \):____:____:____:____:Untrustworthy

Popular:____:\( \Box \):____:____:____:____:____:Unpopular

Honest:____:____:____:\( \Box \):____:____:____:Deceitful

Strong:____:____:\( \Box \):____:____:____:____:Weak

Capable:____:\( \Box \):____:____:____:____:____:Incapable

Cautious:____:____:\( \Box \):____:____:____:____:Careless

Clever:\( \Box \):____:____:____:____:____:Dull

Good guy:____:____:____:\( \Box \):____:____:____:Bad guy
III. Ranking

Another method for determining student beliefs via the questionnaire asks the students to place a group of items in a rank order. This method can be especially enlightening for determining belief relationships for like items. However, it is important for the teacher to remember that the students must be aware of the specific criteria upon which the ranking is to be based. That is, all of the students must be operating on the basis of the same criteria if the results are to be comparable. An example of this type of questionnaire would be as follows.
Student Number One.

Instructions: Below is a list of crimes that are common to our society. Please rearrange this list in order of what you consider to be the most offensive to the least offensive to the individual victim.

1. Assault  Most offensive  1. Murder
2. Libel
3. Slander
4. Grand theft
5. Assault with a deadly weapon
6. Armed robbery
7. Petty larceny
8. Murder
9. Rape
10. Arson  Least offensive  10. Petty larceny
Student Number Two.

Instructions: Below is a list of crimes that are common to our society. Please rearrange this list in order of what you consider to be the most offensive to the least offensive to the individual victim.

1. Assault

2. Libel

3. Slander

4. Grand theft

5. Assault with a deadly weapon

6. Armed robbery

7. Petty larceny

8. Murder

9. Rape

10. Arson

Most offensive

1. Murder

2. Rape

3. Assault with a deadly weapon

4. Arson

5. Armed robbery

6. Grand theft

7. Slander

8. Libel

9. Assault

10. Petty larceny

Least offensive
Student Number Three.

Instructions: Below is a list of crimes that are common to our society. Please rearrange this list in order of what you consider to be the most offensive to the least offensive to the individual victim.

1. Assault  Most offensive
2. Libel
3. Slander
4. Grand theft
5. Assault with a deadly weapon
6. Armed robbery
7. Petty larceny
8. Murder
9. Rape
10. Arson  Least offensive
Instructions: Below is a list of crimes that are common to our society. Please rearrange this list in order of what you consider to be the most offensive to the least offensive to the individual victim.

☑ Assault                          Most offensive 1. **Murder**

2. Libel - writing untrue

☑ 3. Slander - damaging personal reputation

☑ 4. Grand theft

☑ 5. Assault with a deadly weapon

☑ 6. Armed robbery

7. Petty larceny - minor theft

☑ 8. Murder

☑ 9. Rape

☑ 10. Arson

☑ 11. Least offensive
Instructions: Below is a list of crimes that are common to our society. Please rearrange this list in order of what you consider to be the most offensive to the least offensive to the individual victim.

- Assault [X] Most offensive 1. Murder
- Libel 2. Arson
- Slander 3. Assault with a deadly weapon
- Grand theft 4. Assault
- Assault with a deadly weapon 5. Robber
- Armed robbery 6. Armed robbery
- Petty larceny 7. Grand theft
- Murder 8. Petty larceny
- Rape 9. Slander
- Arson [X] Least offensive 10. Libel
Student Number Six.

Instructions: Below is a list of crimes that are common to our society. Please rearrange this list in order of what you consider to be the most offensive to the least offensive to the individual victim.

1. Assault 
2. Libel 
3. Slander 
4. Grand theft 
5. Assault with a deadly weapon 
6. Armed robbery 
7. Petty larceny 
8. Murder 
9. Rape 
10. Arson

Most offensive 1. Murder

Least offensive 10. Petty larceny
Instructions: Below is a list of crimes that are common to our society. Please rearrange this list in order of what you consider to be the most offensive to the least offensive to the individual victim.

1. Assault
2. Libel
3. Slander
4. Grand theft
5. Assault with a deadly weapon
6. Armed robbery
7. Petty larceny
8. Murder
9. Rape
10. Arson

Most offensive: 1. MURDER
2. ARSON
3. RAPE
4. ARMED ROBBERY
5. ASSAULT WITH A DEADLY WEAPON
6. GRAND THEFT
7. ASSAULT
8. LIBEL
9. SLANDER
10. PETTY LARCENY

Least offensive: 1. MURDER
2. ARSON
3. RAPE
4. ARMED ROBBERY
5. GRAND THEFT
6. ASSAULT
7. LIBEL
8. SLANDER
9. PETTY LARCENY
10. PETTY LARCENY
IV. Grids

A grid is a convenient technique for determining multiple beliefs concerning a given list of items. The students are asked to consider a variety of characteristics or criteria and then assign or not assign them to a list of like items. Consider the example below.
Student Number One.

Instructions: We receive information or news through a variety of media. Listed below are some examples. For each example please place a check in the box below the characteristics or traits listed above the grid which you believe to generally characterize it.

<table>
<thead>
<tr>
<th></th>
<th>Believable</th>
<th>Investigative</th>
<th>Biased</th>
<th>Attempts to be honest</th>
<th>Creative</th>
<th>Reliable</th>
<th>Accessible</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyewitness (self)</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Eyewitness Accounts</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Rumors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tabloids</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News Magazines</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Radio</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV News</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV Documentaries</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
Student Number Two.

Instructions: We receive information or news through a variety of media. Listed below are some examples. For each example please place a check in the box below the characteristics or traits listed above the grid which you believe to generally characterize it.

<table>
<thead>
<tr>
<th></th>
<th>Believable</th>
<th>Investigative</th>
<th>Biased</th>
<th>Creative</th>
<th>Reliable</th>
<th>Accessible</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyewitness (self)</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Eyewitness Accounts</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Rumors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tabloids</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>News Magazines</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>TV News</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>TV Documentaries</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Student Number Three.

Instructions: We receive information or news through a variety of media. Listed below are some examples. For each example please place a check in the box below the characteristics or traits listed above the grid which you believe to generally characterize it.

<table>
<thead>
<tr>
<th></th>
<th>Believable</th>
<th>Investigative</th>
<th>Biased</th>
<th>Attempts to be honest</th>
<th>Creative</th>
<th>Reliable</th>
<th>Accessible</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyewitness (self)</td>
<td>[ ]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eyewitness Accounts</td>
<td>[ ]</td>
<td></td>
<td></td>
<td></td>
<td>[ ]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumors</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[ ]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tabloids</td>
<td></td>
<td>[ ]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News Magazines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td>[ ]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV News</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[ ]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV Documentaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Student Number Four.

Instructions: We receive information or news through a variety of media. Listed below are some examples. For each example please place a check in the box below the characteristics or traits listed above the grid which you believe to generally characterize it.

<table>
<thead>
<tr>
<th></th>
<th>Believable</th>
<th>Investigative</th>
<th>Biased</th>
<th>Attempts to be honest</th>
<th>Creative</th>
<th>Reliable</th>
<th>Accessible</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyewitness (self)</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eyewitness Accounts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Tabloids</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News Magazines</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Radio</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV News</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV Documentaries</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Student Number Five.

Instructions: We receive information or news through a variety of media. Listed below are some examples. For each example please place a check in the box below the characteristics or traits listed above the grid which you believe to generally characterize it.

<table>
<thead>
<tr>
<th>Media Type</th>
<th>Believable</th>
<th>Investigative</th>
<th>Biased</th>
<th>Creative</th>
<th>Reliable</th>
<th>Accessible</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyewitness (self)</td>
<td>✅</td>
<td></td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eyewitness Accounts</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumors</td>
<td></td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers</td>
<td></td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tabloids</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News Magazines</td>
<td></td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td></td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV News</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV Documentaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✅</td>
<td></td>
</tr>
</tbody>
</table>
Student Number Six.

Instructions: We receive information or news through a variety of media. Listed below are some examples. For each example please place a check in the box below the characteristics or traits listed above the grid which you believe to generally characterize it.

<table>
<thead>
<tr>
<th></th>
<th>Believable</th>
<th>Investigative</th>
<th>Biased</th>
<th>Creative</th>
<th>Reliable</th>
<th>Accessible</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyewitness (self)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eyewitness Accounts</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumors</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspapers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tabloids</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News Magazines</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>TV News</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>TV Documentaries</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
TECHNIQUE NUMBER THREE: THE INCOMPLETE SENTENCE

The incomplete sentence is another rather direct technique for ascertaining student beliefs. As with the questionnaire, teachers may direct incomplete sentences to rather specific items relative to a given topic. Unlike the questionnaire, however, incomplete sentences allow the students more freedom to elaborate on their responses to such items. This might be viewed as a move toward a qualitative as well as a quantitative assessment of what the students believe.

The following exercise was developed to determine some beliefs that students may hold regarding modern-day China.
Student Number One.

Instructions: Please complete the following statements dealing with the People's Republic of China. Your responses should indicate your beliefs about that country.

1. I think that most Chinese are ... little and have little eyes. Some are educated, but most are not. They are short and play ping-pong.

2. If I were to go to China, I would expect to ... lots of people. Martial arts, crowded living conditions, they have no luxuries.

3. If Chinese students my age were to visit the U.S., they would be most surprised by ... 
   Are living style, dress

4. Most Chinese people would like to be ... free and live in the U.S. ... make money. Businessmen

5. Most Chinese people would like to have ... money and own restaurant have more luxuries.

6. Most Chinese people believe ... that we are rich and lazy or that we are horrible.
Student Number Two.

Instructions: Please complete the following statements dealing with the People's Republic of China. Your responses should indicate your beliefs about that country.

1. I think that most Chinese are ... fairly smart people. Of course I would expect to see industrious but not much extreme discipline and respect and practice of the martial arts.

2. If I were to go to China, I would expect to ... see modern buildings and pagodas. Eat Chinese food and sleep on the floor. Go to the movies. See bicycles.

3. If Chinese students my age were to visit the U.S., they would be most surprised by ... disrespect to elders. The every American kids are allowed to do more own thing. Don't have to read any red books. The amount of grass.

4. Most Chinese people would like to be ... rich and respected and raise member of socialist party or free

5. Most Chinese people would like to have ... a car and pleasures

6. Most Chinese people believe ... that respect will get you placed in Mao Tse Tung Red book
Student Number Three.

Instructions: Please complete the following statements dealing with the People's Republic of China. Your responses should indicate your beliefs about that country.

1. I think that most Chinese are ... regular people, just like us. They have middle class and poor people (rich ones too).

2. If I were to go to China, I would expect to ... see lots of poverty and overpopulation.

3. If Chinese students my age were to visit the U.S., they would be most surprised by ... American drugs. They would have a hard time relating to American music and the people (different cultures).

4. Most Chinese people would like to be ... doctors and lawyers.

5. Most Chinese people would like to have ... money, cars and straight eyes.

6. Most Chinese people believe ... in different gods and have different views of life in general.
Student Number Four.

Instructions: Please complete the following statements dealing with the People's Republic of China. Your responses should indicate your beliefs about that country.

1. I think that most Chinese are ... small, yellowish skin, sly, sneaky, strong

2. If I were to go to China, I would expect to ...
   See a completely different culture. Farmers growing lots of rice and the cities very dirty and slummy.

3. If Chinese students my age were to visit the U.S., they would be most surprised by ... the different kinds of communities we have.

4. Most Chinese people would like to be ... accepted by other cultures more than they are now.

5. Most Chinese people would like to have ... their way! But doesn't everyone?

6. Most Chinese people believe ... that they are right! Though we all do. They have different religions but they are strictly followed! Respect for other people.
Student Number Five.

Instructions: Please complete the following statements dealing with the People's Republic of China. Your responses should indicate your beliefs about that country.

1. I think that most Chinese are . . .

   SNEAKY, CUNNING, COW GUS, SHOUT

2. If I were to go to China, I would expect to . . .

   SEE PEOPLE EATING WITH CANN STICKS AND RIDING BIKES

3. If Chinese students my age were to visit the U.S., they would be most surprised by . . .

   MY WAY OF LIVING AS COMPARED TO THEIRS

4. Most Chinese people would like to be . . .

   IN CONTROL OF THE WORLD

5. Most Chinese people would like to have . . .

   A MARRIAGE, A CAR, PRIVACY

6. Most Chinese people believe . . .

   IN BUDDHA
Student Number Six.

Instructions: Please complete the following statements dealing with the People's Republic of China. Your responses should indicate your beliefs about that country.

1. I think that most Chinese are ... short and poor, extremely smart, know martial arts, slanted eyes.

2. If I were to go to China, I would expect to ... martial arts, many different customs, eating, clothing, pagodas, bicycles.

3. If Chinese students my age were to visit the U.S., they would be most surprised by ... the way we dress, the way we talk to elders.

4. Most Chinese people would like to be ... to be more free.

5. Most Chinese people would like to have ... a black belt in karate.

6. Most Chinese people believe ... the red book.
Student Number Seven.

Instructions: Please complete the following statements dealing with the People's Republic of China. Your responses should indicate your beliefs about that country.

1. I think that most Chinese are ... Short, Sneaky People, who run around in robes.

2. If I were to go to China, I would expect to ... Visit Perkins and see people ride bikes and eating rice.

3. If Chinese students my age were to visit the U.S., they would be most surprised by ... Our school systems, fashions.

4. Most Chinese people would like to be ... Wealthy.

5. Most Chinese people would like to have ... a standard of living close to ours, TVs.

6. Most Chinese people believe ... All Americans are rich.
TECHNIQUE NUMBER FOUR: THE INCOMPLETE STORY

The incomplete story is a more elaborate model of the open-ended concept. It allows the students the freedom to expand upon the breadth and depth of the beliefs they hold. Simultaneously, it challenges students to integrate those beliefs into a story line and to begin to consider the possible consequences of holding those beliefs by challenging them to project them to other characters or other times.

Variations of this technique might include incomplete editorials, incomplete movies, incomplete petitions, incomplete newscasts, incomplete news releases, incomplete historical events, et cetera.

The following incomplete story asks students to express some ideas about life in the future.
A TIMELY TRIP

2033

The dry-roasted peanut rolled across the tray, hesitating an instant before falling over the edge. A short bounce off of the richly padded seat projected it into the aisle. Its brief journey was brought to an abrupt halt by the crunching step of the stewardess who happened to be passing by at that instant. As far as the peanut was concerned it was a matter of bad timing, a simple case of being in the wrong place at the wrong time. Some would say that the peanut's untimely end was a fluke of history.

If the stewardess demonstrated any sign of annoyance as a result of having crossed paths with the dry-roasted it went unnoticed by Mike. In fact the entire succession of the peanut's valiant attempt at escape had been lost on Mike. As he absent-mindedly selected the next victim to face pulverization, ingestion and digestion from among the complimentary pack of nuts provided by the airline, Mike's mind was miles or years away. You see, Mike was still trying to determine if the space between his departure and arrival should be measured in units of time or distance, or both.

2002

"How do I know that I can believe you?"

"Listen, Mike, we've been all through this before. If you don't trust me why did you bother to have me over again to discuss it?"

"Luther, it's not that I don't trust you. You have to admit that your story is a little nutso."

"So was Christopher Columbus' story, Mike. I know that it sounds too far out to believe, but you could at least give it a try."

2047

"Another cup of coffee, sir?"

Mike was brought back from where his mind had taken him. It was the same stewardess who had accidentally annihilated the dry-roasted.

"Why not?" Mike replied. They still had a good way to
travel and Mike was still a bit edgy about this flight. Perhaps another cup of coffee would do some good.

2002

"Luther, long time no see. Where have you been keeping yourself?"

"I've been busy, Mike, and I need to talk with you."

"Sounds urgent, Luther, are you in some kind of trouble?"

"No, nothing like that, but it is urgent."

"Well listen, it's getting on towards evening, what do you say we discuss it over dinner at Sarti's? I'll grab a coat and be right with you."

Thunder rumbled in the distance as the two men made their way to the metro station. It was one of those indecisive spring evenings that Mother Nature liked to stage. The sun, beginning to sink in the evening sky, was about to be engulfed by the huge black clouds hurrying eastward as if trying to get home before dark. For the moment, all was perfect. The air was moist and fresh from the two previous showers that had come to call earlier in the day. They had left the grass and newly-formed leaves covered with tiny jewels of nourishing water. These tiny droplets were busy collecting what sunlight remained, dissecting each beam to form millions of multi-colored, miniscule spotlights. These tiny pinpoints of light, dancing on the fresh greenery, produced a dazzling illusion reminiscent of the Emerald City in the Land of Oz.

All of this was lost on Luther. Luther was an aging physicist who had never been able to rid himself of the mechanical industriousness inherited from his Teutonic ancestors. He was not a cold person. He could be warm and compassionate, especially when his attention was directed towards other people's problems. Still, it cannot be denied that Luther was different. He was destined to view the world from a perspective quite unlike most of his contemporaries'. Luther's world was one of analysis and synthesis. Take it apart and put it back together, only better. While others might have noticed the beauty of this particular spring evening, Luther, if he noticed anything about it at all, would have been cognizant only of such things as light refraction, H₂O and various atmospheric conditions. Although he and Mike engaged in idle conversation on their way to dinner it was obvious that Luther was preoccupied and anxious to be done with something.
Mike, on the other hand, was enjoying the evening and all that it had to offer. Although it was obvious that Mother Nature was preparing to vent her fury, Mike was the type of person who could appreciate the beauty in something as ominous as a spring thunder storm. Despite this ability to appreciate the simple things in life, Mike, like Luther, possessed a highly logical and analytical mind. But, Mike's logic was that of a journalist. Perhaps that gave him a better perspective on things. He had the ability to step into and understand the microcosms of the many scientists with whom he was acquainted, and at the same time integrate each of those microcosms to form a more wholistic view of experience. To put it concisely, Mike was at the top of his field, the chief scientific editor for the nation's largest news magazine, was highly respected within the scientific and journalistic communities alike, but he still found time to stop and smell the roses.

"Good evening, sir. How many please?"

"Two, please."

"This way, sir."

The two men settled into their chairs, studied the menu and ordered dinner.

"O.K., Luther, what's on your mind?"

"It's hard for me to begin, Mike, it's so complicated."

"Relax, will you? Just take it easy and start at the beginning."

"O.K., Mike, we go a long way back, right?"

"All the way back to Apollo. You were busy trying to get a man on the moon before the Russians, and I was working on my first big assignment."

"A success for both of us."

"Yes, I guess that launch did more than put Neil Armstrong up on that piece of rock. It sure started us on our way. I never dreamed that when we met down in Houston that you would end up as America's foremost space expert and I the chief scientific editor for 'Lookout.'"

"It's amazing, isn't it, to consider how important Apollo seemed back then and how trivial it all seems now."
"Now, now, Luther, remember 'one small step for man . . .''"

"I know, I know, you don't need to get melodramatic, Mike."

"Sorry, I couldn't pass it up." They both chuckled and it eased the tension a little.

The conversation was interrupted at this point by the arrival of the waiter with salads and drinks.

"O.K., Luther, you've succeeded in buttering me up with your reminiscence. Now, what do you have on your mind?"

"It's not really buttering you up, Mike. I just wanted you to keep in mind that we go back a long way. You trust me, right?"

"Right."

"You trust my abilities, right?"

"Sure."

"You trust my integrity, right?"

"Right. Come on, Luther, get on with it."

"O.K., O.K. It's just that I have to be sure."

"Sure of what?" Mike was beginning to lose his patience. Both men were well into their sixties and it crossed Mike's mind while they were sitting there that perhaps Luther's work was starting to get to him. He had never seen Luther act this way.

Once again the conversation was interrupted, this time by the arrival of the entrees. As the waiter retired they tried again.

"Mike, as we look back at Apollo and see how far science has progressed, not just in space, but in all aspects of life, do you ever wonder where it's all leading? What things will be like one hundred, two hundred years from now."

"Sure, who hasn't? But you didn't bring me here to talk about science fiction."

"Maybe there is more science involved in such an idea than fiction. Maybe someday man will be able to look into
the future and find out what awaits him."

"Come off it, Luther, did you come here to fantasize or do you have something serious to discuss?"

"Hold on, Mike. You're Mister Big Time Science Editor, are you forgetting that one of the first rules of experimental science is that any theory is at least worthy of consideration?"

This remark struck a sour note with Mike. He didn't know for sure whether it was because it was directed at him personally, or because of the way that Luther had put it or because he knew that Luther was right. Mike realized that he was wrong to have dismissed Luther's idea as hastily as he had, but now that his ego was involved it was hard for him to admit it -- even to himself. Stewed crow does not go particularly well with prime rib, but it was obvious to Mike that he was now obliged to eat a side order of it anyway.

"O.K., Luther, you're right. I was too hasty in my judgment. I will admit that the idea that we may someday be able to see into the future should not be dismissed as impossible."

"No, Mike, we must go further. It must be considered as possible!"

2080

The "fasten seat belt" sign pierced the darkness of the cabin with a bright red glow. Mike's apprehension continued to grow. There was a soft "prrrr" from the landing gear as the wheels were locked into position.

"What will it be like?" Mike wondered. Luther had been successful in convincing Mike, but as the moment of truth arrived Mike's recurring doubts were becoming intensified. Mike let his mind slip into the past once more.

2002

"Luther, I'm sorry about dinner the other night. I hope you will accept my apology. I've been thinking about what you said and I've decided that I wasn't very fair with you or your ideas. If it's all right with you, I'd like for you to go over the whole thing again and I promise to be a better listener this time."
"I know that it's hard to believe, Mike, and I can't blame you for being skeptical. In fact, I expect you to be, that comes with the job. Let's start off by looking at what we know.

First, we know that the atom is the basic building block of all matter in the universe.

Second, we know that these atoms are in a constant state of motion with electrons orbiting a nucleus made up of protons and neutrons.

Third, we know that the numbers and motions of the electrons allow for the recombination of atoms to produce different forms of matter. Chemically speaking, such recombinations are the bases of all chemical reactions, including life itself.

Now, given what we know about the nature of atoms and how they recombine, it stands to reason that if someone were somehow able to determine the exact location, direction of movement and speed of movement of every atom in the universe, then one would be in a position of knowing where each of them was going to be in the next instant or at any instant thereafter. In short, one would have a sort of atomic telescope by which one could peek into the future."

"That all sounds well in theory, Luther, but how does one go about tracking down every atom in the universe and determining where they are headed and how fast?"

"That is a difficult problem, Mike, or perhaps I should say 'was.' It is that to which my attention has been turned the past few years. We have known for years that radioactive atoms give off a form of energy that is perceptible only with a Geiger counter. I began wondering if maybe all atoms did not give off the same or some similar kind of energy which could be received by an instrument somewhat like a Geiger counter. After several years of experimentation I found that such was indeed the case. Each of the different types of atoms -- hydrogen, oxygen, et cetera -- gave off their own individual signals at their own frequencies.

Once that was determined, it became a problem of collecting, recording and interpreting those signals. That task appeared quite impossible and it was at that point that I nearly gave it all up. However, providence -- if there is such a thing -- intervened to my good fortune.

While listening to the signals of each of the different types of atoms on the receiver I had constructed, I was struck
by the intensity of the reception. Further experimentation began to confirm what I had begun to suspect, namely that I was dealing with a type of signal stronger and more durable than any before ever detected by man. Quite possibly, it was the ultimate form of energy and also, quite possibly, it was capable of traveling across the entire universe. If this was correct, I now had the means needed to collect all of the information that I needed to test my chemical telescope. Of course, at this point I had no way of knowing whether or not I was correct, but I had to assume that I was in order for the project to continue.

You can imagine the mixed emotions I felt with the possible discovery of this ultimate form of energy. It was as if every atom in the universe was crying out to me, telling me where they resided, where they were headed and how fast they were headed there. It was at once exhilarating that I possessed the means to hear their message, yet utterly frustrating that I had not the means of separating all of their voices. The situation was similar to that of asking a stadium filled with people for information and having them all reply at once, but not in unison. It was that multiplied billions of times."

"Incredible! What were you able to do?"

"I was stuck again, or so it seemed. I had what I believed to be a sound theory. I had reason to believe that I had discovered a new form of energy by which I could listen to my little friends from all over the universe and I had the equipment needed for doing the listening. Still, I was faced with the mind-boggling task of trying to listen to an almost infinite number of voices at one time. Then it hit me. It was the phrase 'mind-boggling.' Mike, there have been many tasks over the course of our lifetimes which have been considered 'mind-boggling,' yet they have been accomplished. How? By the creation of other types of brains. Electric brains. Computers. Computers capable of handling more pieces of information than could ever be possible with the human brain."

"Yes, Luther, but no computer is capable of handling that much information. After all, information is stored inside of computers on material substances such as tapes or chips. I can't even begin to imagine the size of a computer which would be capable of handling signals from every atom in the universe."

"You're right and you're wrong, Mike. There is no computer, as you know it, that is capable of handling that amount of information, but there is a new type of computer that can
do it. You see, I realized, just as you did, that there is no conventional computer that is capable of handling the amount of information of which we are speaking. I also realized that merely increasing the size of already existing computers was no answer. It was evident that some new break-through in computer technology was needed if I was to proceed. To this problem I devoted several years of study. Then, as with Archimedes, it hit me. I was immersed in the very solution for which I was searching.

As you just pointed out, Mike, computer capabilities to this point have been dependent upon the storage potential of material substances. One day while considering the potential of the new form of energy I had discovered, it hit me. Was it possible that energy as well as matter could serve as a repository for information? The rest is history, Mike. With relatively little experimentation I found what I needed. It was then a simple matter of converting the data bank of a WBM UltraMax from chips to energy waves, and I then had the capabilities to receive, record and recall information on the desired wave lengths, make adjustments for distances traveled (based upon the strength of the signals received) and to determine the directions of movement (based upon the previous signal received). What I had, Mike, was the ability to position every atom in existence for a given point in time in the history of the universe.

Using that point in time as a starting place, I then returned to the original theory. You see, I had all of the necessary information. Knowing the position, speed and direction of every atom at that point in time, I also possessed the capabilities of knowing that same information at any future point in time. In short, I had developed a method for determining what was and is to be in the future."

"O.K., Luther, you build a pretty convincing case the second time around. At least, let's say that it doesn't sound as incredible as it did the other night at dinner. Who took part in this project with you that can corroborate what you've told me?"

"No one, Mike. You're the only person beside myself that knows anything about this."

"I suspected that from the way you've been acting. The question that keeps running through my mind, Luther, is 'Why me? Why did he come to me with this?' It can't be to write it up. You've had more than enough experience publishing papers that you don't need me."
"You're right, Mike, it's not your writing abilities that I'm after. I need your credibility. For reasons of my own, I've decided that I want to go to the people with this. You are the most trusted and well-known science editor in the world. People believe what you have to say."

"At this point, I don't even know if I would believe what I would have to say, Luther. What do you have in the way of evidence?"

"One thing, Mike, and this is where you come in. Hold on to your hat. What I am about to tell you now is even more unbelievable than anything I have said thus far. Can you give me a fair hearing?"

"After what I've heard to this point, Luther, I think I'm prepared for anything. Shoot!"

"Thanks, Mike. I'll give it to you short and straight. Without going into a great deal of detail, I've developed a procedure for integrating the human brain with the WBM UltraMax."

"You mean to say ... ?"

"That's right, Mike. By placing the brain in a state of hypnosis, where it is not distracted by outside stimuli, it is able to receive information which has already been interpreted by the computer via electric conductors. That information is then translated into audio and visual signals inside the brain, thus endowing the receiver with the ability to see and hear what is going to happen in the future."

"You mean to say that you can actually transport someone into the future?"

"No, Mike, as far as I know that is still science fiction. For years, imaginative writers have dreamed and schemed of plans for transporting human beings along time lines into the future. The difficulty that was inherent in each of those plans was that by transporting a body from one period in time to another one in the future, one changed the course of events of the future. By actually being there, in a physical state, the traveler would cause a rearrangement of the existing atoms. This would make the traveler a participant rather than an observer. My methodology avoids that difficulty. Because what the brain experiences is an illusion -- albeit an accurate illusion -- created by the computer, it allows one to view the future without disrupting it."
Mike felt the wheels touch the ground. He heard the
groan of the plane's structure brought on by the roar of the
engines as they began to brake the aircraft's progress down
the runway. At least, he imagined so. Everything around
him suggested a commercial airliner. It was all accurate
to the last detail. Yet, something, a nagging feeling in the
back of Mike's mind kept telling him that it was somehow not
quite right. This was not like other flights he had been on.
He still had not gotten used to the feeling. On flights of
this nature the mind travels back and forth from the present
to the past, much as it does when one dreams.

On these flights, though, the present is the future, or
more accurately, an illusion of it. The mind experiences
some difficulty separating the real from the unreal; fact
from illusion. Mike was well aware of what his destination
was. He had been on several flights similar to this one, al-
though much shorter. Each had been a success. What he had
spoken as prophesy became history at its appointed time.
While confirming Luther's theory, those flights were, never-
theless, small potatoes. Mike had played at the Wright
brothers and tired of it quickly. Now he was Lindbergh. He
was traversing an ocean of time. Unlike Lindbergh, however,
Mike had no way of knowing what awaited him -- if anything --
upon his arrival. Also unlike Lindbergh, Mike's flight was
all an illusion.

The brakes on the landing gear squealed out in protest.
There was a barely perceptible jerk as the plane's motion
came to a halt. Mike rose from his seat to start for the
door. As he moved into the aisle he staggered his step to
avoid grinding the tiny pieces of what was once a dry-roasted
peanut into the carpet. "Why?" he wondered. He knew that it
was an illusion. Perhaps it was just in his nature to go out
of his way to avoid stepping on dreams. He would have to
consider that later, in another time, for at the moment the
massive metal door was being swung open in front of him.
Mike stepped out and gazed upon the future.
Complete this story providing a detailed account of what Mike saw and encountered on his trip to the year 2110. You may use any story line that you choose, but include descriptions and comments on each of the following topics:

1. Government and politics;
2. International relations;
3. Economy;
4. Education;
5. Family life;
6. Living conditions;
7. Entertainment;
8. Working conditions;
9. Technology;
10. Transportation;
11. Communication;
12. Racial relations;
13. Religion;
14. Environment;
15. Health and medicine;
Student Number One.

It seemed like it always did upon entering or returning from land that the Transcontinental Airlines had taken him to. Once off though, he could tell that this was not an ordinary business trip. His feet were moving, or so it seemed, but he wasn't making any progress. It was like everything around him was moving.

He looked upon a strange land, unlike his native U.S. State of Texas. Mike sensed at being all alone and when he looked back the supposed plane was nowhere around. Though he felt alone there were clues of habitants and life for in the distance was the outline of cities and their buildings.

As Mike got closer to what he thought was a city it was nothing of the kind. Mike viewed what seemed to be numerous treehouses. Just like when he was a kid. Some were stacked on top of each other but none were farther off the ground than five feet.

Mike wished it were night so as he could blame it on the darkness. On the contrary though, it was a bright clear afternoon. Free from clouds and something he hadn't noticed until now -- no smog. In fact it was so clean that there was no smell. Everything took on a new beauty suddenly. There was much foliage and unusual flowers all in the best condition and in excellent bloom. It looked like it was warm but that was the strange thing. Mike had no senses except sight and hearing. He would reach to touch something and though he could see that his hands were on the delicate blossoms he could not feel them. The same thing happened with his smell. Mike thought about this for awhile then figured it was probably something Luther never told him. Probably some restriction because it would disturb the placement of the atoms.

As Mike looked around more he became more delighted with the simpleness of the nature and peacefulness that enclosed around him. He hoped that this was just not one rare spot in the future. As he looked out at the horizons his hopes seemed to be fulfilled because what he once thought were buildings seemed to be more and more trees and wilderness.

He finally saw someone climbing down the crude but neat "treehouse." As far as Mike could tell it was a woman much like the women in "his" present time. The only thing that seemed different was that her hair was of a high, dark gloss and very long. The bulky mass hung down to the back of her knees. She was dressed in regular shorts and a top.

Next out of this house came what seemed to be her husband and a small child. Before Mike could observe them any closer a whole throng of people came down from their treehouses. Many delighted yelps from children greeting one another rang in Mike's ear. Along with this was the adults conversing with one another as they all walked in the same general direction. There was a sense of closeness among everyone
and though everyone was trying to get a word Mike sensed they all were really listening to one another.

As Mike seemed to be next to them, walking with them like on his old street where he used to live. They took no notice of him. This did not come to too much of a surprise to him.

All the people, after walking something short of two miles came a big thatched house with much land around it. The grass was a healthy green and looked very plush. Everyone sat down and seemed to be anticipating something or someone. Mike finally figured out who they were waiting for. The sign on the front lawn said "Head of this fair country: George A. Trentwood." Then it suddenly occurred to Mike was this the only human habitation on this earth? Or was this little section all that was left of this earth?

Mike had no more time to think of this because everyone was standing up and looking toward the slowly opening door. Out stepped the man who was the head of this country. He smiled and waved to the crowd numbering in all about six hundred. He shook hands to a few sitting closest and made small conversation for a bit. No one else came out of the house therefore Mike assumed he was the only one in control.

He then kneeled down and everyone followed. In a strange tongue he chanted and half-sung to a strange melody. He was constantly opening his arms and looking up to the skies. This proceeded for about fifteen minutes while the people all were silent with bowed heads and intently gazing at their clasped hands. There was a moment or two of silence this Mr. Trentwood and then he stood up and motioned everyone else did.

After some more quiet moments he addressed the crowd in the following way: "Dear fine friends and neighbors, I hope everyone had a pleasant night and an eventful day in celebrating our Almighty's Birthday. Before getting on to the business at hand I would like to inform those that have not heard of a sorrowful happening. Irma our beloved seamstress passed away on the Lord's day. It was an unpainful death. This colaborates with our discussion for today. We are all concerned with the death rate. In the last four months our existence as a country has shrunk from eight hundred to our present population of six hundred. The question is how can we contact the inhabitants that we think are on the other side of the world? Many scripts left from our descendants lead us to believe that besides us there is another country that was not affected by the atomic explosion of 1985. We are led to believe that from these old papers they know of a way to stop the radioactivity from this explosion of bygone years to keep from affecting them. We need to do something. Our most worthy in the heaven above has not been able to help us as of yet. We can't keep depending on him. He wants us to do something now!! I can't offer all the solutions so we need all
of you to empty your minds of all your suggestions."

"Excuse me sir," said a meek man from the crowd.

"Speak up, let us all share in your wisdom," replied Trentwood.

"I don't mean to be pessimistic but we have no means of communications except for an old luxury liner ship that is badly damaged."

"True, True," said Trentwood disparingly, and we have no tools or supplies and though we all have an abundance of money is it not a shame we could not use our money to have someone repair it?"

Another man approached Trentwood, "This is innane, to keep wishing and thinking of the past. We have no transportation or any other way to commute with the faraway friends!"

"Very well," Trentwood said wearily, "We shall resume this matter tomorrow at the same time. The new jobs are posted with their new workers and tonight there will be a concert by the Fred Allen Family. They learned how to play some old instruments that were found awhile back. So lets all attend."

At the instance everyone went in every direction. The mothers home to collect food and prepare lessons for their childrens learning. Even though the population was small it was decided from the beginning that each family would do their best to teach their children just in case the world would ever get back to a normal population again. This was decided upon because much knowledge would be needed if enough people were found to begin rebuilding and crossing to the other parts.

After the father's found their new jobs they hurried off to where each was. Some were in charge of maintenance, while others who had knowledge worked with Trentwood to overcome the epidemic that was so drastically reducing their existence.

So went another day, just as usual as any other and just as uneventful. The people here, Mike thought, will never figure out a way to stay alive because most of them have lost all hope.

As Mike watched them do their dull routines he wondered how they could still be so happy yet it was obvious none of them believed that something good would happen. To them the end of the world was already here.
2110

This trip was the farthest that Mike had ever undertaken. He was apprehensive, but he knew that his trips were essential. If he had not taken these trips before, it wouldn't have been possible to prepare for some of the surprising events that he predicted. "Well, I better get on my way!" he thought as he walked into the year 2110.

2110

Mike was glad he was back on the plane. This trip had been quite startling, yet exciting. As he settled back into his seat, he took out his summary report and began to look it over.

DATA SHEET - 2110

Government and Politics: Things have changed on Earth extremely. The government in the United States has improved greatly, evidently WW IV changed the structure somewhat. Now, the U.S. is controlled by a pure democracy, possible because of the advancement of the computer field. This had greatly cut down on corruption. Government control and involvement have gone down also, after intense study of the socialistic and communistic countries involved in the war. It has been proven that people in these cultures are less intelligent and productive due to their lack of freedom.

International Relations: With the tri-power system brought in after the war, things seem to be fairly stable at this point. The Russians seem to be having a little trouble keeping their child-countries happy and under control, but this is because of their selfishness and hunger for power. The Chinese seem to be doing well, but the United States are definitely the happiest and most well-adjusted to the system.

Economy: Same as other trips. Countries go from prosperity to depression, and round and round. After the war, things were up, but they are starting to slide. This is the same thing that's been happening for 300 years!!

Education, Family-life, Living Conditions, Entertainment: I put these together because now most are centered in self-fulfilling home units. Computers do the teaching, starting with messages sent to the child's brain while it is still in its infant-care unit! Education still takes many years, but now with the vast amount of knowledge that must be
learned, this is necessary. Entertainment is also in the homes, with everything and anything right at the occupant's fingertips. Family life has improved greatly with the big shift back to rigid morals. Living conditions are still basically the same, not so good for the poor, mediocre for the average, and pretty plush for the upper-class.

Technology and Working Conditions: Technology has advanced so far, there are very, very few things that can't be done. Technology has greatly improved working conditions for every vocation because of the efficient use of computers.

Transportation and Communication: Transportation now includes sub-earth transit tubes which transport people anywhere they want in the world in thirteen minutes. All of the shorter-distance transportation needs are met by mass transit systems, utilizing solar energy. This has also helped tremendously in the war against pollution. Communication is now as simple as a phone number to get in contact with anyone in the world. Most people possess a small calculator-type object with a small picture screen that can be carried with them at all times. Everyone has a twelve digit humanoid identification number and this is what is used not only in communication systems, but banking, shopping, and anything which needs identification. A person codes in this number and the other person's tele-com beeps, and in a matter of seconds anyone can communicate with anyone no matter where they are. This is just one of the many small advances in communication, but this is the most widespread in use.

Racial Relations and Religion: Finally people have realized that people are equal, and these generations read about the prejudices of the past as ancient history. They are unable to understand the people's ignorance. As far as religion goes, there are still many varied forms of belief, but people have learned to accept them. Race and religion don't seem to be causing problems as much as the conflicts in the Tri-power system.

Environment: The environment is much cleaner and safer than in the past. Newer and cleaner energy forms have helped in this area. Also after cancer was attributed to the pollutants in the environment, everyone in every country did all they could to save what was left of the world.

Health and Medicine: Advances in this area are phenomenal. Cancer has been cured, there is a vaccine for the common cold, and heart attacks are a thing of the past. One problem that advances have brought on is over-population. The average life-span is now 150 years. There is no solution for
this problem as of yet.

2002

Back at home, Mike laid in his bed unable to sleep. He knew it was a great achievement to be able to look at the future, but sometimes he wondered if he really wanted to see it.
"I can't believe I have actually seen it." Mike was in total amazement at the many changes and developments he had seen on his trip into the future. Mike realized that the trip was only in his mind but the things he had seen will actually happen. Listing what he would want to include in his article Mike came up with these points.

Government and Politics - The world is run by 3 major figures elected by popular vote, computed by an infallible computer (the computer cannot be tampered with). Each person voted by pushing a button and telling the computer which ones they want, on their home computer. A computer compiles the I.Q., mental stability, and ability to make important and essential decisions. The data is given to the people of the world and they base their vote on that information. The three men must be from 3 different countries, usually U.S., Russia, China.

International Relations - Weapons making for public good was outlawed 50 years ago. Private citizens are not allowed to carry firearms and cannot purchase them. Every country belongs to the federation and all the major decisions are made by the cabinet of the trio leaders and themselves. The everyday decisions for each country are made by the countries legislation that is also elected by popular vote. Each country is pledged to help all the other countries of the federation in times of need.

Economy - Each country sets aside enough money to produce food for its entire population. Each person pays a 20 percentage tax of all their earnings to their country of which the country pays 25% of that to the federation. No country has a national debt any longer. Unemployment and welfare no longer exist - everyone is working somewhere.

Education and Family Life - Each boy and girl goes to a country paid for school from age 6 to 18. Each child learns three major languages, English, Russian, French or Spanish. At age 18 the person can either get a job with the government or go on to secondary education and become anything he/she wants. A family lives in their own domed house or in a living complex (ultra deluxe apartments) both run by solar power alone. Usually the Mother or the father stays home until all the children are at least 10 or the parents can switch off every other year. Children are very stable in this set up, there hasn't been a mental illness case in the whole federation for 10 years.
Entertainment - There are still many actors and actresses in the federation. They give dramatic performances at theaters all over the federation. There is no alcohol allowed anywhere. There are machines that turn your dreams into reality for a space of time, they transfer you mentally to your dream situation.

Working Conditions - are ideal. Long ago the 6 hour work day was established with equal pay for everyone doing the same job, no matter color, religion or sex.

Technology - Many developments have been made such as space ships that travel twice the speed of light, everything in the home is run by solar power. Computers can be programmed for any problem. There are so many new advancements such as a telephone that uses telepathic wavelengths.

Transportation - The average person uses a car that is run by compressed air that refuels itself while running it travels a foot off the ground like a hovercraft - the cars can travel great distances overland without having to stop. The cars can be turned to automatic when on the roadways and will follow a designated path. The car is a very efficient transportation method.

Communication - There are telepathic telephones for the wealthy which gets hold of the person wanted wherever he is. But mostly the average person uses the old picture phone where you see the person you are talking to. For corporations - they can send correspondence on the light waves and get it across the world in seconds.

Racial Relations - Every person is judged on their contributions to society. People are thought of as people not blacks, chinks, indians, etc. Racial descrimination is unheard of. There are so many people of mixed configuration that it doesn't matter anyway.

Religion - Every person believes what they want to believe and everyone respects each others beliefs. There are few established churches left only the Catholics and the Jews still have even a slightly structured church.

Environment - is still a big problem. Great steps have been made but the damage done in a few years is taking many lifetimes to correct. The rivers and oceans are mostly clear but the air is another problem. The great amount of exhaust from machines has been almost impossible to be rid of. They have made great advancements and will soon solve the whole problem.
Health and Medicine - Cancer was cured 70 years ago and old age disease is recessed until people live to an age of 150 on an average. It is known for a person to live up to 200 years of age. There are few diseases left but the flu has not been cured yet. People live at peace with themselves and their society. Crime is down to a minimum. A murder has not been committed in 15 years.
TECHNIQUE NUMBER FIVE: VISUAL COMMUNICATION

It is with some hesitancy that the writer refers to visual communication as a separate technique. As the term is used here, visual communication constitutes no more than an adaptation or variation of other open-ended techniques. Nonetheless, it has been afforded individual status in this work because of its unique method for student response. The writer believes that that uniqueness warrants separate consideration.

The visual communication technique asks students to express their beliefs about a given topic or issue using some form of visual communication. This may be taken to mean through photographs, half-tones, line art, drawings, paintings, slides, motion pictures, et cetera. Students might be permitted to use reproductions or required to produce original works or both. Another option might be to allow the students to use more than one of the media mentioned above. Whatever the choice, the point is to encourage students to experiment with alternative means of communication. In light of the increased utilization of a variety of media in twentieth century life it is believed that it can only be beneficial for students to learn to express themselves in numerous ways.

The following visual communication exercise gives students the opportunity to express their beliefs about the
concept of "the good life."
Instructions: Everyone is familiar with the saying that a picture is worth a thousand words. This is because visual forms of communication often have the potential to convey information, ideas and feelings that might otherwise be difficult to express. Stop for just a moment and think of some of the more memorable paintings, photographs, motion picture scenes or television programs you have seen. Would they have had the same impact if the artists or producers had been limited to using only the written or spoken word?

Verbal communication will always be an important part of human civilization, but we now live in an age in which there is an increased emphasis on visual communication as well. There are currently more methods for communicating visually than at any other time in history and they are being used more and more. Thus, it is important that each of us becomes literate in a visual as well as a verbal sense.

This exercise has been designed to give you the opportunity to express your ideas using a visual format. Over the period of the next month please compile a collection of illustrations which convey your beliefs about what the "good life" is. You may use drawings, photographs, cartoons or any other type of graphic you choose. They may be original illustrations that you have done or they may be items that have been copied or clipped from other sources. The important thing is that the illustrations you choose convey your personal beliefs about the subject. They should communicate only your ideas and feelings about what the "good life" is or would be.

After you have compiled a sufficient number (at least 25) of illustrations please organize them in a notebook. You may choose to organize them chronologically (perhaps from early life through retirement), topically (for example, work, leisure, recreation, possessions, family life, etc.) or by some other method. Keep in mind that a person who looks at your final product should be able to determine what you consider to be the ideal life only by seeing the illustrations you choose.

This is an opportunity to express yourself and show your individuality. Be creative and have a good time!
Student Number One.
Student Number Two.
CONCLUSION

The reader has now been introduced to five examples of techniques that might be used to initiate reflective thinking in the classroom. In addition, the reader has been afforded the opportunity to review the responses of a number of students to those techniques. The writer believes that the responses of those students illustrate how those techniques have been and can be utilized in a classroom setting to encourage students to express their beliefs relative to a given topic or issue.

It should be re-emphasized that the few techniques identified in this chapter are only representative of a much larger group of techniques that might be employed to have students express their beliefs in the classroom. By altering the format of the techniques, the medium of presentation, the method of response and the number of students involved, and by employing a little creativity, the classroom teacher should be able to devise any number of techniques that would be suitable for his/her particular needs.

In the following chapter the reader will be given the opportunity to see how several of these techniques may be employed as part of a unit approach to social studies education. Chapter V will be presented in the form of a teaching unit just as it would appear if it were not a part of this work. The unit has its own introduction and is written as
if it were to speak directly to classroom teachers. The reader is invited to place him/herself in the role of a secondary social studies teacher and to consider the potential effectiveness of the unit as presented.
CHAPTER V
RIGHT-TO-WORK VS. UNION SECURITY
AN AMERICAN LABOR HISTORY UNIT

INTRODUCTION

Have you ever been a member of an education class or an inservice workshop where the instructor, group leader or group members spent hours of your time making profound statements about WHAT social studies teachers should be doing, but never quite got around to dealing with the problem of HOW to do it? You should promote critical thinking! You should get students involved with the subject! You should be more relevant! The list goes on, ad infinitum. Frustrating, isn't it? You leave those classes or meetings feeling that there must be more to social studies than memorizing names, dates, events, rules, generalizations, et cetera. There must be more to it than book reports, tests, films, field trips and current events. There must be more, but HOW does one do it?

If you have experienced these thoughts and feelings, then this unit should be of interest to you. This unit not only suggests WHAT can be done with the topic of labor history, but HOW one can do it. In an easy-to-understand manner,
this comprehensive teaching unit lays out and discusses the purpose, approach, objectives, process and teaching methodology which could lead to a successful learning experience. In addition, the unit contains the teaching materials and primary resource materials needed with which to begin. In short, "Right-to-work vs. Union Security: An American Labor History Unit" provides you with all of the information you will need to start making social studies more relevant, meaningful and enjoyable for you and your students.

PURPOSE

The purpose of the "Right-to-work vs. Union Security: An American Labor History Unit" is to promote high level, critical examination of beliefs concerning problems that are related to and important in the field of labor history. Please note and keep in mind that the most significant words in the preceding sentence are "critical examination of beliefs." The words "critical examination" should make it clear that we are interested in more than the students' abilities to read, recall and recite information. In addition, we are interested in the development of the real-life skills of determining what data may be relevant to a problem, locating those data and then employing them in a useful manner. The student USES the data made available from the social sciences rather than merely attempting to commit limited amounts of those data to memory.
Think about it. Of what advantage is it to arm a student with a multitude of specifics and generalizations if the student does not know how to make use of them? We do not assume that if we give a person a set of tools that the person is then able to repair automobile engines. We do not assume that if we give someone a set of surgical instruments he or she is ready to operate. We do not assume that the acquisition of a musical instrument makes one a musician. Why then do we assume that by merely presenting a student with a selected pool of information and then testing his or her ability to recall that information that the student will know how to make use of it? If the skills involved in making use of social science data are not incorporated into the social studies curriculum, if they are not taught and practiced in the social studies classroom, where will they be included?

When experiences of the present require students to use history and the social sciences, learners can and will think critically. It is the responsibility of the teacher to design and involve students in such experiences. At this point we must start dealing with HOW.

APPROACH

The key to getting students to think critically and to make use of the social sciences is to design experiences that focus upon the beliefs students hold. Each of us has
beliefs about practically everything. They are an integral part of our characters. They very nearly define our essence as human beings. Thus, one finds that people are protective of the beliefs they hold. When their beliefs are challenged, people are quick to defend them with the data at hand. If the data at hand are inadequate, and if there is sufficient incentive, people often search for more information. In other words, they try to learn more, because they have a personal incentive to learn.

That same incentive can be utilized in the social studies classroom. If the teacher can determine what beliefs a student holds to a degree strong enough to stimulate investigation, and then involve the student in an experience of a problematic nature concerning those beliefs, there is a reason to learn.

The teacher must employ the judgment and maturity needed to design experiences to focus upon beliefs that are important to the students and at the same time educationally defensible. Experience for the sake of experience is no more defensible than is knowledge for the sake of knowledge. Some beliefs are more important than others, or at least they are perceived to be so. Because of obvious limitations, not all student beliefs can be investigated in the social studies classroom, nor should they be. On the other hand, not all beliefs that are worthy of investigation are perceived as such by the students.
Bridging the gap between student beliefs and social studies exercises may appear to be more difficult than it actually is. Generally speaking, people are most concerned with those beliefs that they perceive to most directly influence the things they consider most important in their lives. Not coincidentally, humankind being of a social nature, those beliefs are more often than not related to the social sciences. Thus, they are subject to what may be termed the social studies. If the exercises employed in the classroom necessitate the use of social science data, and if they emphasize the instrumental value of the social sciences to the process of critically examining beliefs, the gap can be bridged.

That critical thinking skills need to be taught and practiced in the social studies classroom is not a revelation that has just recently come to light. For the most part, social studies teachers have agreed to that proposition for years. The mystery is, HOW does one consistently get students to think critically about social studies problems or issues? The answer is, one doesn't! At best, one can hope for superficial or academic exercises on the part of students, if one can get them to consider such problems at all. Frankly, in most cases these are not really the students' problems, or at least they do not perceive them as being such. They are the problems of the teachers, or they are the problems of historians, or economists, or political scientists,
but they are not often the problems of students. Students, as with many, need some incentive to reflect upon and think critically about a problem in a manner that has some educational value to them personally. They need to feel that the problem is their problem. Grades, or some other external stimulus, may serve as an incentive to persuade students to go through the motions of reflection, but it is doubtful that the results of such an experience will be very meaningful. To paraphrase John Dewey, what transpires is an exercise that is logical in its progression, but devoid of psycho-logical meaning to the students. For the exercise to be educationally meaningful, the students must experience the problem psycho-logically. The problem must relate to the students' lives. It must somehow affect them.

Same old rhetoric, right? Wrong! Social studies problems can relate personally to students' lives and have an effect upon them. Surely, we all believe this. It is preached daily in educational methods classes, social studies classrooms, teachers' meetings and inservice seminars as a justification for teaching social studies. The problem is that it is seldom demonstrated. Students are told to "learn" this or "learn" that because it will someday be useful. The instrumental value of what is to be "learned" seems always to lie in the future. Because the utility of what is "learned" is seldom demonstrated the students come to view knowledge as an end of education instead of as a means to
continuous growth. Unless one is prepared to argue that knowledge has some inherent value that is more important than its instrumental value, then it must be agreed that something is amiss. Educators in general have put the cart before the horse. We have placed the future before the present. The result is that the present is lost, and when the future arrives students are at a loss as to how to make use of what it is they were supposed to have "learned." Perhaps Dewey put it best when he said:

... When preparation is made the controlling end, then the potentialities of the present are sacrificed to a suppositious future. When this happens, the actual preparation for the future is missed or distorted. The ideal of using the present simply to get ready for the future contradicts itself. It omits, and even shuts out, the very conditions by which a person can be prepared for his future. We always live at the time we live and not at some other time, and only by extracting at each present time the full meaning of each present experience are we prepared for doing the same thing in the future. This is the only preparation which in the long run amounts to anything.¹

This unit provides the teacher with several techniques that may be employed to cause students to question beliefs they hold related to the subject of labor history. The exercises further require the students to make use of the data available from the field of labor history and the other social sciences in an attempt to formulate beliefs that are warranted. The specific objectives of these exercises and of the entire series are enumerated in the next section.
OBJECTIVES

The specific objectives of this unit are:

1. The student will consider, examine and evaluate personal beliefs and the beliefs of others concerning significant problems associated with the history of labor.

2. The student will become familiar with and utilize the process of reflective thinking in an attempt to examine, evaluate and formulate beliefs that are warranted by the evidence available.


   3a. The student will translate data from one form to another and from one level of abstraction to another.

   3b. The student will interpret data.

   3c. The student will extrapolate implications, consequences, trends and conclusions from materials.

   3d. The student will analyze data looking for constituent parts, relationships and organizational principles.
3e. The student will evaluate data in terms of internal evidence and external criteria.

3f. The student will apply specific data, abstractions and rules of procedure to a problem.

3g. The student will produce a proposed set of operations for testing hypotheses as well as a unique communication stating a position using the skill of synthesis.

4. The student will employ data from a variety of the social sciences including history, economics, sociology, political science, et cetera.

5. The student will employ data from a wide variety of media, such as books, periodicals, films, filmstrips, speakers, interviews, field trips, et cetera.

Critical or reflective thinking is a high-level mental process that requires the use of a variety of cognitive skills. Through little fault of their own, many teachers have not been familiarized with those skills to any great extent during their formal training. In general, prospective teachers have encountered these skills rather cursorily in an introductory education course or occasionally in a methods course. Far too little time is allocated for comprehending, mastering and learning to apply these skills in a
unit or lesson plan. As a result, many teachers are averse to incorporating the use of high-level cognitive skills into their teaching activities because they feel uneasy or ill-prepared in the area of the skills their students would need to utilize.

It is not the purpose of this unit to offer a course pertaining to cognitive behaviors for its users. However, the writer does make a strong recommendation that one obtain and review a copy of *Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook I: Cognitive Domain* (New York: David McKay Co., Inc., 1956). This work provides the teacher with definitions and examples of the cognitive skills employed in critical thinking. In addition, the authors have devised illustrative examples that may be used as a guide for teaching or evaluating a student's performance of each of these skills. Making use of these examples, it is not difficult for the teacher to incorporate the use of these skills into the curriculum on an immediate basis.

One further comment needs to be made concerning the subject of thinking skills. Some teachers have been reluctant to incorporate the use of cognitive skills into their educational plans because they feel that their students are not capable of utilizing them effectively. This is analogous to a math teacher not teaching math skills because the students do not know how to solve the problems in the math book. Where else are they to learn those skills?
In most instances the belief that students at the secondary level are incapable of utilizing and mastering high-level cognitive skills is unwarranted. In many instances outside of the classroom young people are very adept at applying these skills to problem situations. Consider the young mechanic who makes use of automobile manuals to repair engines, or the athlete who studies films of himself or herself in action to improve form and performance, or the young sports enthusiast who stays attuned to a variety of media for the information needed to exchange ideas with others. In each of these cases the young people must do more than just recall and recite data. They must be able to translate, interpret, analyze, evaluate, apply and synthesize data from verbal and visual sources in their efforts to resolve their problems or achieve their goals.

CONTENT

The specific content of this unit focuses upon the related topics of union security and right-to-work laws. These topics may be viewed as opposite sides of the same coin; one side being the attempts of labor leaders to maintain the security of unions, the other side being the attempts of a diverse coalition of people to keep union membership voluntary. Each side has been able to muster sound and persuasive arguments, which probably accounts for why this controversy is still with us today.
The union security controversy goes back to the roots of organized labor in the United States. It is generally accepted that organized labor suffered unwarranted abuses during its early years because of the economic and political power wielded by management. One of the most potent weapons in management's arsenal was the "yellow dog" contract. The "yellow dog" contract hindered union organization by making it a condition of employment that the employee not belong to a union. Those who wished to work were prevented from organizing to represent themselves in negotiations with management.

Because of the excessive abuses of management and the growing social conscience of the nation, labor found that it was able to extract an increasing amount of support from the Congress during the early years of the twentieth century. That support reached a high note during the Great Depression when the National Industrial Recovery Act -- later the National Labor Relations Act (Wagner Act) -- outlawed the "yellow dog" contract and guaranteed to labor the right to organize and bargain collectively.

The Wagner Act gave organized labor new muscle. The former abuses of management were legally tempered by the enumeration of a series of unfair labor practices for management. However, the Wagner Act made no mention of unfair labor practices for labor unions. A primary result of this was the appearance of the "closed shop," the direct antithesis of the "yellow dog" contract despised by labor in earlier
years. In a "closed shop" membership in a union became a condition of employment. The "closed shop" strengthened the position of organized labor, but it also raised serious philosophical questions. Many people began to wonder if the Wagner Act had gone too far.

During the 1940's a group led by Senator Robert Taft of Ohio began to call for a federal statute providing that no person should be compelled to join a union as a condition of employment. Congress responded in 1947 by passing the Labor-Management Relations Act (Taft-Hartley Act) over the veto of President Truman. That act designated the institution of a closed shop as an unfair labor practice by unions. It did not, however, prohibit other forms of union security agreements such as the union shop or the agency shop. Congress left the decision on those forms of union security up to the separate states. Section 14(b) of Taft-Hartley stated that the union shop, agency shop and other forms of union security were authorized except where they may be prohibited by state law.

Many states quickly responded by passing so-called right-to-work laws that eliminated, to differing degrees, some or all forms of union security within their respective jurisdictions. To date there are twenty states that have right-to-work laws in effect, most of them in the South and West. For the most part, the large industrial states, where union strength is greatest, have resisted right-to-work
movements.

Since the enactment of the Taft-Hartley Act, the debate over right-to-work legislation has yet to abate. Organized labor continually assails right-to-work laws as an ever-present threat to the security of unions. To this date, repeal of section 14(b) remains high on the list of labor legislation that union leaders would like to see Congress enact. On the other side, the National Right-to-Work Committee and the U. S. Chamber of Commerce have kept up their efforts in urging other states to enact right-to-work laws, their latest success being as recently as 1976.

As you can see, the debate surrounding right-to-work legislation and union security agreements is still with us. It is not likely, however, that many of your students really care about the issue one way or the other. Or do they? What if you were to ask your students such questions as the following:

If you owned a business where the union threatened a strike unless you negotiated a union shop contract requiring everyone to join the union within 30 days after employment, would you do it even though you did not believe in it and you knew that some of your employees did not wish to join?

If you were a dues-paying union member would you want all employees at your place of work to be compelled to join the union since they are receiving the benefits the union is extracting from management?

If you took a job somewhere where a union exists should you be forced to join the union even if you did not want to?
It is likely that nearly every student in your class holds strong beliefs about such questions. It is also likely that most of them would not be hesitant to express those beliefs as well as the reasoning that supports them. Thus, while the students may not be overly eager to examine the issue of right-to-work versus union security, they may be more than willing to engage in classroom activities that focus upon their beliefs about that issue. It is your job as the teacher, then, to see to it that the issue is transformed from "your" problem to "their" problem by focusing upon the students' beliefs and then ensuring that the activities in which the students engage relative to those beliefs are reflectively oriented. It is believed that the materials in this unit will help you to do so.

MATERIALS

In this unit you will find the following materials:

1. A brief questionnaire designed to help you determine the nature and strength of the beliefs your students hold. It is suggested that you administer this questionnaire as the first activity of the unit. Further, it is suggested that you not discuss the responses to the questionnaire in class. The students will have the opportunity to discuss their beliefs soon enough. Simply file the questionnaires away somewhere after you have surveyed them and let your students forget about them.
2. Three techniques designed to give your students the opportunity to express their beliefs in class. It is not necessary that all, or even two, of these techniques be used. One may be sufficient. It is suggested that whichever you decide to use that you have your students write their responses prior to discussing them. This may help alleviate the possibility of peer pressure influencing the students' initial responses.

3. A series of articles presenting various points of view concerning the issue of right-to-work vs. union security.* These articles are to serve as a preliminary source of data for the students' use. In no way are they meant to be the only source of data. An important part of reflection is determining what data may be appropriate and then locating those data. You should encourage your students to find other sources of data such as interviews, guest speakers, films, records, tapes, primary and secondary historical works, field trips and other possibilities that are not developed in this study.

4. A post-test to measure the degree of change in beliefs as a result of the unit. This is not a test in the sense that the students receive grades. It is identical to the questionnaire completed before the unit began. By

* For purposes of brevity these articles have not been included in this dissertation.
completing this survey a second time, the students are given an opportunity to determine if and how their beliefs have changed and to reflect upon why.

PROCEDURE

By making use of one or more of the techniques contained in this unit you should be able to determine where each student stands on the issue or right-to-work versus union security. Armed with that information, your task as teacher is to see that a problematic situation arises relative to the beliefs the students have expressed. This may be accomplished in a variety of ways.

To raise some doubt in the minds of the students regarding their beliefs you may decide to hold a class discussion focusing on their responses. Since it is likely that a wide variety of beliefs will be expressed, it is also likely that problems will arise spontaneously in the form of disagreements. In addition, it is nearly certain that with the proper guidance from you the need for more information will become apparent at some point during the discussion. Another alternative is to present the students with the belief of some known authority and challenge the students to defend their thinking as compared to that of the authority. Or, you might choose to present some new information which is contrary to the positions of the students and challenge them to reconcile their beliefs with that information. Using
another tack, you might ask the students to formally critique each others' positions in light of their own beliefs. Or, you may simply play "devil's advocate" and engage the students in an informal debate. There are many other alternatives. If you use your imagination you should be able to come up with the one that best suits your needs.

After you have seen to it that a problematic situation exists and that the students are beginning to have doubts about their beliefs, the time is at hand to introduce and guide the students through the process of inquiry. Specifically, you must help the students define their problem(s); frame hypotheses; consider sources of data; gather data; translate, interpret, analyze, and evaluate data; apply the data and formulate conclusions regarding their hypotheses. By suggesting to the students that missing data may be the vital ingredient needed to effectively work with their problems and then introducing them to a process that teaches them to find and apply those data, you will have laid the groundwork for demonstrating how the past experiences of mankind may be employed to deal with the immediate problems of today.

EVALUATION

Brief mention should be made concerning the topic of evaluation. Remember, the purpose of this unit is to give students the opportunity to learn to utilize the reflective
process and social science data in an attempt to formulate warranted beliefs. Thus, students must be evaluated on the basis of their demonstrated behavior in using that process and those data. You may choose to use any of the standard instruments or methods available for purposes of evaluation--tests, quizzes, reports, position papers, debates, tapes, films, notebooks, et cetera--but you must keep in mind that what is being evaluated is the use of a process, not the product that results.

CONCLUSION

It is hoped that you will be able to obtain positive results from the use of the techniques and materials provided in this unit. Keep in mind that your main functions are (1) to initiate a state of doubt in the minds of your students regarding their beliefs; and (2) to attempt to facilitate their use of the process of inquiry to attempt to resolve that doubt. In short, your role is to teach the students how to think, not what to think.
DIRECTIONS: This is a questionnaire designed to help you identify your beliefs concerning a contemporary problem in American society. For each of the statements below please circle the response that best represents your belief. The statements should be taken in a general sense. It is realized that beliefs are frequently influenced by or dependent upon specific circumstances. However, most of us hold beliefs which we believe to be warranted for a wide variety of examples. If you have trouble dealing with one of the statements because you feel that not enough is known, try prefacing it with the qualifier "In most cases . . . ."

Please keep in mind that there are no "right" or "correct" answers, so please feel free to be as honest and open as possible about what you believe.

CODE: SA=Strongly Agree, A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

SA A U D SD 1. American laborers should have the right to join labor unions.

SA A U D SD 2. American laborers should have the right not to join labor unions.

SA A U D SD 3. American laborers should be compelled to join labor unions.

SA A U D SD 4. No person should be refused employment or in any way discriminated against on account of membership or non-membership in any labor organization.

SA A U D SD 5. If one receives the benefits of being represented by a labor union one should join that labor union.

SA A U D SD 6. If one receives the benefits of being represented by a labor union one should be compelled to join that labor union.

SA A U D SD 7. If one receives the benefits of being represented by a labor union one should at least be made to pay for the costs of representation.
Questionnaire, page 2

8. Majority rule is traditionally recognized as the American way of solving problems.

9. Majority rule is a good way to solve problems.

10. Majority rule is the best way to solve problems.

11. If a majority of workers in a plant choose to be represented by a labor union, everyone in the plant should join that union.

12. If a majority of workers in a plant choose to be represented by a labor union, everyone in the plant should be compelled to join that union.

13. Compulsory unionism is undemocratic.

14. Compulsory unionism violates the rights of the minority who may not wish to join a union.

15. Compulsory unionism is a violation of individual rights.

16. Being compelled to join a union because the majority of workers in a plant support that union is the same as being compelled to abide by city, state, and federal laws because the majority of citizens support them.

17. If union members at a work site represent the majority of workers they should have the right to insist that only union members be employed.

18. It is a basic right of individuals to associate freely with persons and organizations of their own choosing.

19. If laborers are not compelled to join labor unions where they work, unions will be weakened and working conditions will not improve or may become worse.
Questionnaire, page 3

SA A U D SD 20. Generally speaking, unions are so strong these days that they do not need to force people to belong in order to keep their power to bargain.

SA A U D SD 21. Compulsory unionism leads to corruption in labor unions.

SA A U D SD 22. Compulsory unionism weakens labor unions.

SA A U D SD 23. Compulsory unionism strengthens labor unions.

SA A U D SD 24. Federal or state laws should protect the practice of compulsory unionism.

SA A U D SD 25. Federal or state laws should prohibit compulsory unionism.
A DILEMMA

Art Bragan is president and majority stockholder of a growing industrial concern in Marion, Ohio that employs close to two hundred laborers. Art started his business a little over three years ago with seventeen employees. Since that time the business has grown rapidly and Art has not been as close to his employees as he initially was.

Because they felt that their concerns were not receiving proper consideration, some of the employees began promoting the idea of union representation. Eventually, enough interest was generated that a sufficient number of employees were recruited to authorize an election to determine if a union was warranted. Art was disappointed with the development, but he recognized his employees' right to organize and did nothing to discourage their efforts. An election was held and about sixty percent of the employees voted in favor of affiliating with Local 78 of a large industrial union.

Contract negotiations began within the month with the union acting as bargaining agent for all of the plant's employees. The talks went smoothly until they reached the union's demand that a union shop be established. Under a union shop agreement all employees who were not already members of the union would be compelled to join the union within thirty days after the contract was signed or lose
their jobs.

Art was against the union shop personally because he felt that it was an infringement upon individual rights. Besides, the fact that forty percent of the employees voted against the union indicated that a significant number did not wish to join.

The union, on the other hand, pointed out, that sixty percent membership was not a significant enough number to operate an effective union. In addition, they argued that forty percent of the employees should not receive the benefits of union representation while the other sixty percent paid for it.

Negotiations went on and agreements were reached on wage and benefit issues. The contract was stalled, however, because no settlement could be achieved concerning the installation of the union shop. Art knew that the union was within its rights under the Labor-Management Relations Act (Taft-Hartley Act) to negotiate for a union shop. He also knew that he was within his rights under the same act to resist the union shop. Mediation was tried, but failed. Both sides were afraid of an arbitrated settlement, so that idea was rejected.

Finally negotiations broke down. The union threatened a strike unless its demands were met. Art's business was good and was still growing and he realized that a strike would be a financial disaster and could even ruin him.
Besides, a majority of his workers wanted a union shop. Yet he felt that to give in on this issue would compromise his values and would let down the employees who did not wish to join the union.

What should Art do?

Why? (Give as many reasons as possible.)
Dear Voter,

Jack Gunther is your State Representative to the Ohio Legislature. He is currently a member of a special labor committee established to consider legislation proposed to prohibit union security agreements in Ohio. Such laws have been termed "right-to-work" laws in other states.

Union security agreements are agreements between unions and management that are designed to protect and insure the union's well-being. They may take a variety of forms. The most common union security agreements are:

1. The Closed Shop - under this agreement an individual must be a member of the union in order to be eligible for employment and must retain that membership as a condition of continued employment. The closed shop was legal under the National Labor Relations Act (Wagner Act) passed in 1935. However, the Labor-Management Relations Act (Taft-Hartley Act), co-sponsored by Senator Robert Taft of Ohio, outlawed the closed shop in 1948.

2. The Union Shop - under this agreement an individual who is not a member of the union may be hired, but must join the union within a specified period of time (usually thirty days). Further, the courts have determined that for a union shop agreement to be authorized union membership must be made available to new employees under the same terms and conditions as those provided to other employees and that an employee may not be discharged due to non-membership in the union for any reason other than failure to pay dues or fees.

3. Maintenance-of-Membership Agreement - under this type of agreement an employee who is a member of the union when a union-management agreement is signed or who becomes a member during the term of that agreement must remain a member during the duration of the agreement. In other words, union members may not resign from the union until the union's contract with management expires.
4. The Agency Shop — under this agreement an individual may be employed without joining the union, but must pay to the union the amount of initiation fees and dues paid by union members.

5. Service Fee Agreement — under this agreement an individual may be employed without joining the union, but must pay to the union his or her share of the costs incurred by the union in performing its duties as bargaining agent for all employees.

Except for the closed shop, each of these types of union security agreements is permissible under the Taft-Hartley Act. However, section 14(b) of the Act also clearly allows any state to enact legislation to prohibit any or all types of union security agreements including those that would otherwise be legal under federal statutes.

As a result of section 14(b), right-to-work laws have been adopted in nineteen states. Unions have vigorously opposed this legislation claiming that it weakens the labor movement and that it is unfair for an employee to receive the benefits of being represented by a union in collective bargaining without sharing in the cost of maintaining the union. Right-to-work groups, on the other hand, argue that the real issues involved are the rights of the minority and individual rights, and that no one should be compelled to join or financially support an organization against their wishes.

Representative Gunther has heard from lobbyists on all sides of the issue, but he is still uncertain as to what kind of bill he should support in committee. As he sees it,
the committee can recommend a bill outlawing all types of union security, or it can recommend to prohibit some types, or it can do nothing and leave the law as it is under Taft-Hartley.

Representative Gunther needs your help. Please write him a letter stating your beliefs about union security agreements and what type of bill you think he should support.
INCOMPLETE STORY

Al Johnson operates a stamping machine in a small industrial plant in Elyria, Ohio. Al's plant is small as industrial sites go and as a result there is fairly close contact between management and labor. Wage scales and working conditions are similar to other industrial concerns in the area. Despite this, a majority of the workers in the plant felt that it would be in their best interest to be represented by an organized labor union. An election was held and a local machinist union affiliated with a large international was designated as the bargaining agent for all of the laborers at the plant. Al was in agreement with the right of labor to organize but he saw no need for a union in his plant at that time. Al chose not to join.

Several months later the union and management arrived at an operating agreement. One aspect of that agreement established a union shop at the plant. This meant that within thirty days after the agreement went into effect all laborers at the plant must join the union or lose their jobs. The union argued that this was only fair. Since each employee was receiving the benefits of union representation each employee should become a member and support the union.

Al disagreed. He felt that the decision of whether or not to join the union was an individual one and that any attempt to force him to join a union was an infringement
upon his constitutional rights.

Al decided to take his case to court.

Please write two detailed (one page or more) endings for this story. One indicating how you feel it should end and one indicating how it might really end. If both endings are the same you need only write one.
DIRECTIONS: This is a questionnaire designed to help you identify your beliefs concerning a contemporary problem in American society. For each of the statements below please circle the response that best represents your belief. The statements should be taken in a general sense. It is realized that beliefs are frequently influenced by or dependent upon specific circumstances. However, most of us hold beliefs which we believe to be warranted for a wide variety of examples. If you have trouble dealing with one of the statements because you feel that not enough is known, try prefacing it with the qualifier "In most cases . . . ."

Please keep in mind that there are no "right" or "correct" answers, so please feel free to be as honest and open as possible about what you believe.

CODE:   SA=Strongly Agree, A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

SA A U D SD 1. American laborers should have the right to join labor unions.

SA A U D SD 2. American laborers should have the right not to join labor unions.

SA A U D SD 3. American laborers should be compelled to join labor unions.

SA A U D SD 4. No person should be refused employment or in any way discriminated against on account of membership or non-membership in any labor organization.

SA A U D SD 5. If one receives the benefits of being represented by a labor union one should join that labor union.

SA A U D SD 6. If one receives the benefits of being represented by a labor union one should be compelled to join that labor union.

SA A U D SD 7. If one receives the benefits of being represented by a labor union one should at least be made to pay for the costs of representation.
<table>
<thead>
<tr>
<th>Questionnaire, page 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SA A U D SD 8.</strong> Majority rule is traditionally recognized as the American way of solving problems.</td>
</tr>
<tr>
<td><strong>SA A U D SD 9.</strong> Majority rule is a good way to solve problems.</td>
</tr>
<tr>
<td><strong>SA A U D SD 10.</strong> Majority rule is the best way to solve problems.</td>
</tr>
<tr>
<td><strong>SA A U D SD 11.</strong> If a majority of workers in a plant choose to be represented by a labor union, everyone in the plant should join that union.</td>
</tr>
<tr>
<td><strong>SA A U D SD 12.</strong> If a majority of workers in a plant choose to be represented by a labor union, everyone in the plant should be compelled to join that union.</td>
</tr>
<tr>
<td><strong>SA A U D SD 13.</strong> Compulsory unionism is undemocratic.</td>
</tr>
<tr>
<td><strong>SA A U D SD 14.</strong> Compulsory unionism violates the rights of the minority who may not wish to join a union.</td>
</tr>
<tr>
<td><strong>SA A U D SD 15.</strong> Compulsory unionism is a violation of individual rights.</td>
</tr>
<tr>
<td><strong>SA A U D SD 16.</strong> Being compelled to join a union because the majority of workers in a plant support that union is the same as being compelled to abide by city, state, and federal laws because the majority of citizens support them.</td>
</tr>
<tr>
<td><strong>SA A U D SD 17.</strong> If union members at a work site represent the majority of workers they should have the right to insist that only union members be employed.</td>
</tr>
<tr>
<td><strong>SA A U D SD 18.</strong> It is a basic right of individuals to associate freely with persons and organizations of their own choosing.</td>
</tr>
<tr>
<td><strong>SA A U D SD 19.</strong> If laborers are not compelled to join labor unions where they work, unions will be weakened and working conditions will not improve or may become worse.</td>
</tr>
</tbody>
</table>
SA A U D SD 20. Generally speaking, unions are so strong these days that they do not need to force people to belong in order to keep their power to bargain.

SA A U D SD 21. Compulsory unionism leads to corruption in labor unions.

SA A U D SD 22. Compulsory unionism weakens labor unions.

SA A U D SD 23. Compulsory unionism strengthens labor unions.

SA A U D SD 24. Federal or state laws should protect the practice of compulsory unionism.

SA A U D SD 25. Federal or state laws should prohibit compulsory unionism.
CHAPTER VI
SUMMARY

In the introductory chapter of this work the case was made that there are many preservice and inservice teachers who have the ability, the opportunity and the desire to employ reflective thinking as an approach to education, but that they lack the methodological insights and techniques needed to do so. It was suggested that the primary problem such teachers face is that of putting theory into practice. They know what they want to do, but they experience problems conceptualizing how to do it. These teachers require assistance in designing educational exercises that initiate the reflective process in the classroom. It was stated that the purpose of this dissertation was to provide such assistance. Finally, it was noted that the means by which this work would attempt to provide that assistance was by demonstrating that there is an instrumental relationship between the process of reflection -- which hinges upon the examination of stated beliefs -- and a series of teaching techniques that encourage students to express their beliefs in the classroom. By providing the opportunity for teachers to become aware of that relationship and by identifying those
techniques, it was submitted that teachers would be better prepared to initiate reflection in the classroom.

The purpose of chapter one was to lay some groundwork regarding the importance of beliefs in education. In that chapter the writer defined the terms education and belief as they were to be used in this work, and then went on to discuss some matters of an epistemological nature related to those terms. Specifically, it was asserted that the substance of education should be the beliefs of the learner as opposed to the more categorical and extrinsic concepts of knowledge or Truth. A number of arguments were advanced promoting the superiority of beliefs -- especially warranted beliefs -- over knowledge or Truth as a goal of education. In addition, it was pointed out that whether they wish to or not, educators inevitably deal with the beliefs of their students. Thus, it was suggested, the primary question relative to beliefs and education is not IF beliefs will be dealt with in the classroom, but rather HOW beliefs will be dealt with in the classroom. In answer to that question, the writer endorsed reflective thinking as the most desirable method for dealing with student beliefs in the classroom.

Chapter two considered the formal process of reflective thinking, the role of beliefs in that process and the relationship between reflection and educational methodology. The steps involved in the reflective process were enumerated as well as a series of axioms related to the use of that process.
An important distinction was made between reflection and inquiry. Finally, it was asserted that if reflection is ever to become a viable educational methodology it is imperative that teachers become aware of their students' beliefs and in turn make those beliefs the subject matter of reflection.

Chapter three expanded upon the educational applicability of reflective thinking and considered the area of values education. The inadequacies of past attempts at values education were discussed. A more in-depth analysis of two current approaches to values education was provided. The case was presented that each of these approaches suffer serious shortcomings. It was concluded that reflection is a more effective and desirable method for dealing with values in the classroom.

Chapter four may be considered to be the meat of this work. In that chapter the writer presented a series of teaching techniques which are characterized by their potential to cause students to express their beliefs in the classroom. It was pointed out that each of the techniques included in the chapter were presented for consideration in the generic sense. It was also noted that none of these techniques is really new or original to the field of education. What is new and original, it was asserted, is the perspective of these techniques advanced in this work. It was stated that these techniques no longer need be viewed as an
unrelated number of classroom activities, but rather as an integral component to a methodological approach to reflection in the classroom. It was noted that many more techniques could have been included in chapter four, but to have done so would have been to belabor the point. The writer believes that those techniques that were chosen are representative of the total number of techniques which might be used to initiate reflection. Finally, in addition to the presentation of the techniques the writer offered a number of student responses to the techniques so that the reader might judge for him/herself their effectiveness in a classroom situation.

In the fifth chapter the writer attempted to illustrate how several of the techniques discussed in chapter four could be integrated into a social studies unit utilizing a reflective approach. It was the writer's hope that by seeing these techniques as a part of a whole, preservice or inservice teachers might better grasp the idea of how to initiate a reflective unit in the social studies classroom.

IMPLICATIONS FOR FURTHER STUDY

Although the writer has concluded his thoughts on initiating reflective thinking in the secondary social studies classroom, much remains to be done. The writer believes that he has provided preservice and inservice teachers who may make use of this work with the necessary insights and techniques to induce students to express their beliefs in a classroom
setting. Nevertheless, it is obvious that as there is much more to the reflective process there is much more that teachers need to understand before they may become adept at having students utilize that process. Techniques need to be devised or identified which have the potential to create doubt or uncertainty in the minds of the students once their beliefs are expressed. Many teachers could become more proficient in helping students freely form hypotheses, gather, analyze, evaluate and apply data, consider the logical consequences of hypothetical generalizations or formulate conclusions. Each of these processes could be considered topics for future study. It is the writer's hope that the day will come when those who wish to teach reflectively, but have difficulties with one or more aspects of how to do so, will have a detailed set of works available representing each step in the teaching process by which they may be aided in seeing this goal realized.

In addition to topics that focus upon the process of reflection per se, there are other related subjects that could provide the substance for further study. For example, questions remain unanswered regarding the type(s) of schools in which the techniques described in this work could be used successfully. Might they produce better results in so-called advantaged schools because of the students' superior word power, reading performance and experience using traditional forms of data? Or, might such techniques work better in
so-called disadvantaged schools where fewer students have learned to succeed at the task of memorizing the "right" answers? Perhaps these students, who tend to question the values manifested in a traditional approach to education, would be more responsive to an approach that fastens upon their beliefs and is able to demonstrate some utility in the present.

Another factor that might be considered is the degree of homogeneity present in the school. Would the techniques identified in this work be more successful in fairly homogeneous schools where students are likely to be able to work together on projects? Or, might they work better in more heterogeneous schools where there are likely to be greater numbers of divergent views and thus more controversy?

Another topic for possible further study might fix upon the age levels of the students. Although this work is limited to secondary students, it would be relevant to know to what degree the approach advocated could be used successfully with younger students.

A similar, but somewhat different, problem might lead to an investigation of the past overall educational experiences of students as related to the utility of the techniques described. The central question here would examine the differences between students whose educational experiences centered upon their beliefs throughout their school years and those who encountered this type of education only at the secondary
A second major area of investigation for possible future study might concentrate upon teachers. For example, this work was produced for those teachers who have shown some inclination toward and understanding of reflection. Yet, it remains to be seen if the approach espoused might have any effect upon teachers not belonging to that group, either positive or negative. This is a potentially complicated area. As was previously stated, it is assumed that there is a group of teachers who are amenable to reflection that can be identified. But, what of the others? Can it be assumed that the beliefs of the remainder are antithetical to reflection? Or, are some of them simply noncommited for various reasons? If such a group does exist, what are the potential effects of a belief-centered approach to education upon its members? And finally, what will be the effect upon those who are known to be antithetical to such an approach?

A related topic for potential future study that is of major import to this work concerns the effects of the techniques described upon those teachers who are basically inquiry oriented. Will they perceive any connection between the techniques identified and the inquiry process? Will they see the techniques as relevant? Will they view them as useful? Will they integrate them into their teaching style? These are questions that will require extensive and careful latitudinal and longitudinal studies.
Another broad area of possible investigation relates to the effects of using the techniques enumerated upon student performance. One particular subject of interest would be the effects of a belief-centered approach to education as compared to a standard inquiry approach and other more traditional approaches. Although it is not a goal of reflective education to change the content of beliefs, it would be significant to discover if that approach does have any effect upon what students believe. More relevant to the purpose of a reflective approach is how students believe. In this regard it would be important to determine if there are any differences in the way students go about supporting their beliefs as a result of having participated in the three types of education described above. To what degree do students in each of the groups rely upon a single authority as a basis for beliefs held? To what degree do they recognize a relationship between beliefs and data? To what degree do they use data to attempt to warrant beliefs?

Another subject of importance for possible future study is related to the concept of knowledge. There are several aspects which could be investigated regarding this concept. For example, comparing the belief-centered approach, the inquiry approach and the other more traditional approaches, how much knowledge is retained? How long is it retained? What types of knowledge are retained? Knowledge of specifics? Knowledge of trends? Knowledge of skills? Knowledge of
concepts? Knowledge of methodologies? Knowledge of generalizations? Each of these is recognized as having particular utility and it would be significant to determine the effects that the three approaches listed would have upon knowledge retained. Again, such information would have to be based upon longitudinal as well as latitudinal studies.

Besides acquisition and retention of knowledge, another interesting topic for research might be determining students' perceptions of knowledge as a result of their experiences under the three approaches to education named above. Would they tend to view knowledge in terms of absolutes? Or, would they see knowledge as more flexible or malleable with the advent of new data or new ways of interpreting old data?

Another possible topic of exploration relative to student behavior is differences in abilities to approach new or unique problems. Of concern here would be the students' abilities to transfer a methodology useful for one problem or a set of problems to a new or unrelated problem. Would students who were educated via a belief-centered approach demonstrate more competence in transfer of learning as a result of having used their beliefs as subject-matter? Would such students be more capable of conceptualizing or formalizing a plan of attack or methodology? If so, would they be more inclined to make use of such a methodology than, for example, students who had been educated using a strict inquiry approach? Would students educated under a belief-centered
approach demonstrate an affinity for making use of empirical data from a variety of sources? Would they be more amenable to the use of a variety of cognitive skills?

The questions listed in the above paragraphs are difficult ones, but they are questions that must be answered if educators are ever to effectively evaluate alternative approaches to teaching. Although it was not the purpose of this work to accumulate data in support of one approach to education over others, the writer realizes the necessity of such a task if that approach is to be ultimately accepted.

It is hoped that this dissertation will be evaluated in light of its purpose. That is, it is the writer's desire that it be viewed as a prescriptive work produced for the benefit of those inclined to employ a reflective approach to education. Although it is the writer's belief that reflection is a superior approach to education, it was not the intent of this work to prove that such is the case. It is simply hoped that for those who share this writer's belief in reflection that this work will be of service in the attempt to put theory into practice.
LIST OF REFERENCES

Books


ARTICLES AND PERIODICALS


Morrissett, Irving. "Curriculum Information Network
Sixth Report: Preferred Approaches to the Teaching
of Social Studies," Social Education, XL1, No. 3
(March, 1977)

Rest, James. "Developmental Psychology as a Guide to Value
Education: A Review of 'Kohlbergian' Programs,"
Review of Educational Research, XLIV, No. 2,
241-259.