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ABSTRACT

In response to the negative learning environment found in most public schools today, a pedagogical method known as "The 3 Rs" (Reading, Reflecting, and Reacting) was developed to help schools produce active participants in a democratic and pluralistic society. Inspired by the literacy work of Paulo Freire, the method makes extensive use of small group discussion within the context of small and medium sized classes, and considers the role of student motivation to be very important. The technique, which involves the repeated application of a three-step procedure to each topic in a course, appears to promote the development of a variety of higher-order cognitive and affective student characteristics. The initial tryout of the method occurred in a University of Delaware course entitled "Sociological Foundations of Education," with an enrollment of 48. Interviews of the participants revealed an overwhelming amount of student agreement on the value of the technique in promoting many kinds of personal development and stimulating interest in topics initially thought to be boring. An independent course evaluation conducted by the Department of Educational Studies also revealed very positive student response. (Eleven references are attached, as well as a 27-page appendix, which includes materials, activities, and forms used in the initial tryout.) (ARH)

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The 3 Rs

1

A MANUAL

FOR

THE 3 Rs: READING, REFLECTING AND REACTING

INSTRUCTIONAL MODEL

by

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Development of this manual was supported
by the Center for Instructional Effectiveness
at the University of Delaware, Summer, 1986

ABSTRACT

A new pedagogical method, called The 3 Rs (Reading, Reflecting and Reacting), is described and the results of an initial tryout are summarized. The 3 Rs method, inspired by the philosophy and literacy work of Paulo Freire, is a technique which makes extensive use of small group discussion within the context of small and medium sized classes. The technique, which involves the repeated application of a three-step procedure to each topic in a course, appears to promote the development of a variety of higher-order cognitive and affective student characteristics. An evaluation of the initial tryout, which occurred in a university course entitled "Sociological Foundations of Education" having a student enrollment of 48, showed an overwhelming amount of student agreement on the value of the technique in promoting a wide variety of kinds of personal development and stimulating interest in topics initially thought to be boring. Preliminary suggestions for future tryouts and research are offered.

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A. Preface

I have been a teacher since 1958; first at the middle school level (general mathematics and algebra) and then at the university level (research procedures, applied statistics, educational measurement and, most recently, sociology of education, radical educational philosophies, and education and social change in Latin America). Looking back over these experiences and taking into account the many recently published points of view regarding the current state of public education and what ought to be done about it, I have come to the conclusion that what really matters within the context of schooling are: (a) the content and (b) the ways in which students interact with that content. Interestingly, recent critiques of public schooling (e.g., A Nation at Risk report) as well as a great deal of the debate about educational reform (see, for example, recent issues of the Phi Delta Kappan) are almost devoid of attention to these factors, focusing instead on the sorts of things that might be described most appropriately as "administrative tinkering" (e.g., longer school day and year; tougher exit standards; common core, more and better tracking).

While the current criticisms may serve the useful purposes of focusing attention on public schooling and motivating students, parents, community leaders, politicians, etc. to work towards the

improvement of this important national institution, the failure to address what I believe are the most fundamental features of the educational process tends to channel energy and resources in ways which have virtually no chance of addressing the most fundamental weaknesses of current practice. Some of the consequences of these weaknesses are captured in the following lyrics by Tom Paxton:

What did you learn in school today, dear little boy of mine?
What did you learn in school today, dear little boy of mine?

I learned that Washington never told a lie,
I learned that soldiers seldom die,
I learned that everybody's free,
And that's what the teacher said to me.

That's what I learned in school today,
That's what I learned in school.

I learned that policemen are my friends,
I learned that justice never ends,
I learned that murderers die for their crimes
Even if we make a mistake sometimes.

I learned our government must be strong,
It's always right and never wrong
Our leaders are the finest men
And we elect them again and again.

I learned that war is not so bad,
I learned about the great ones we have had,
We've fought in Germany and in France,
And someday I may get my chance.

That's what I learned in school today,
That's what I learned in school.

and the following true anecdote:

Scene

A senior political science major with an overall g.p.a. above 3.6 (on a 4-point scale) and one of the top students in this major, is reading Orwell's Animal Farm. His father sees him.

Dialog

Father: Didn't I see you reading that book last year?
Student: Yes

Father: Why are you reading it again?
Student: Last time I was reading it in order to pass a test; this time I'm reading it to understand it.

The purpose of the 3 Rs manual is to provide guidelines for a technique which, in my view, represents the type of reform which will best prepare students for life in a constantly changing world. Subsequent sections of this manual focus on: persistent, negative effects of current schooling practices; desirable characteristics of any educational environment designed to produce active participants in a democratic and pluralistic society; a theoretical framework from which a pedagogy with these characteristics can be derived; guidelines for implementing the 3 Rs method; a specific example of an implementation of this method; and a discussion of what has been learned to date about this approach and its effect on participants.

B. Some Persistent Problems

Long before students enter high school, a variety of negative effects of schooling begin to arise. These effects, which not only persist but seem to intensify through the remaining schooling experience of many students, appear to me to be systemic in their origin. System characteristics like the undue emphasis on competition, multiple-choice evaluation of student progress, a product-oriented view of the student, and an outdated view of course content as "stuff to be covered", contribute in a large measure to:

1. the failure of students to perceive the relevance of much of the content of schooling
2. unwarranted levels of test and school anxiety
3. cheating on examinations and term papers
4. the development of poor study habits characterized by intermittent test cramming activities with little transferable learning
5. the development of strategies for masking ignorance from the instructor
6. the acquisition of inadequate self-concepts reflected in various types of in-class avoidance behaviors
7. inadequate development of analytic thinking skills
8. inadequate development of written and oral communication skills

9. inability to understand and appreciate different points of view, particularly on issues where the students hold strong prior beliefs

Recommendations made by A Nation At Risk and other reports which emphasize tougher standards, longer school days and years, more rigid external testing programs, etc. do not address these fundamental problems and, hence, have a very low probability of improving the "product" in a manner consistent with the more noble educational goals of our society. In the words of Ohanian (1985), "more of the same produces more of the same," which is exactly what the critics are attacking.

C. Desirable Features of a Learning Environment

Suppose we return to square one and begin with the following assumptions: Learning should be inherently motivating; that is, it should be exciting, interesting, and nearly always fun. It should broaden, not restrict; encourage collaboration and sharing instead of competition and intellectual hoarding; acknowledge individual differences at all stages of the learning process, not insist on equal performance either at the start or end of a learning experience (or, for that matter, require equal rates of achievement and growth throughout the experience); encourage risk taking rather than conservatism; tolerate (and, at times, encourage and rejoice over) the commission of errors instead of punishing them; be positive and supportive, rather than punitive; and, most importantly, liberate, rather than domesticate (see Freire, 1985).

Where does this lead us? In my opinion, it leads to the design of educational environments or structures which promote the development of inquiring, flexible, analytical and adaptable human beings with the skills and motivation needed to continue learning after the current experience is over. Such programs, at a minimum, will:

1. foster the development of higher order cognitive abilities, such as the abilities to analyze, synthesize and evaluate as elaborated by Bloom (1956) and advocated by Sizer (1984) and others.
2. stimulate affective growth (as defined by Krathwohl et al., 1956) including the development of dispositions to attend, respond, formulate value preferences, and develop (or modify) one's value system.
3. promote the development of leadership as well as followership and collaborative skills, including growth in self-esteem, confidence, responsibility, and the ability to view issues and problems from multiple perspectives
4. foster the improvement of personal communication skills such as written and oral expression, and listening.
5. promote the capacity to view problems/issues from multiple perspectives, to withhold judgement appropriately, and to realize that a single correct (or best) answer (or solution) is not always possible.

While statements of educational goals usually attest to the importance of both the affective and cognitive capabilities of students, one is hard pressed to identify the aspects of schooling at any level which contribute to the achievement of all but the most trivial cognitive objectives.

Perhaps this is a result of our inadequate knowledge about how to directly teach things like creativity, imaginativeness and tolerance for other viewpoints. However, we do know a great deal about the construction of environments which not only permit the development of characteristics like these, but which also foster

this development¹. We also know that motivation is the critical element in learning; that people who have a strong desire to learn have a high probability of doing so; yet, the bulk of the literature on learning concentrates on information processing models, text structure, adjunct cues and the like. Therefore, the primary emphasis of the present project was on student motivation and the structuring of a learning environment which would, in some sense, maximize this critical element.

At this point, one may ask what kind of recipe will satisfy the requirements indicated above. One possible answer to this question is provided in the following sections of this manual.

¹The cooperative learning literature (e.g., Slavin, R. (1983); Johnson, D.W. & Johnson, R.T. (1979); Webb, N. (1982)) provides a variety of examples of the effects of cooperative learning environment on the modification of selected affective characteristics as well as the development of specific cognitive

D. Framework

The ideas previously stated are the result of my own personal experience in the schooling process and an exposure to the thinking of others who have confronted and attacked this problem in interesting and innovative ways, oftentimes in quite difficult circumstances.

These others include:

- John Dewey () for his "learn by doing" emphasis.
- Ivan Illich (1971) for his penetrating analysis of the institution called schooling and the identification of its systemic failings.
- Paulo Freire (1985) for his revelations about the relationship between politics and education, his distinction between education for liberation and education for domestication, his pedagogical method which has revolutionized the conception of and approach to literacy education, and his pioneering literacy programs which clearly show the transformational power of education properly conceived.
- the many Liberation Theologies who have used Freire's pedagogy in conjunction with Bible study within Christian Base Communities to awaken millions of oppressed people in developing countries to their abilities and possibilities.
- The people of Nicaragua whose Freire-inspired "pedagogy of shared responsibility" made possible their internationally acclaimed 1980 National Literacy Crusade and their current adult education program. Through these efforts they have shown how a poor, underdeveloped country with meager human and monetary resources can produce profound societal changes (e.g., Miller, 1985).

Undoubtedly, the greatest influence in my thinking has been Paulo Freire who developed an ingenious pedagogy for teaching literacy in underdeveloped and impoverished areas of the world--a pedagogy

which not only teaches the fundamentals of reading and writing; but transforms even the most passive, submissive illiterate into an active social participant. In fact, my initial attempt to develop the 3Rs method began with the question, "If Paulo Freire were to design a university level course with the characteristics stated previously, what might it look like?" While there are obvious important differences between Freire's methodology² and the 3Rs, there is a great deal of commonality in intention, conceptualization and outcome. Without his inspiration philosophy and pioneering theoretical and practical work, this project would never have been initiated.

²See Brown (1978) for an excellent exposition of this methodology.

E. The 3 Rs Method

The 3 Rs method is primarily based on small group discussion and consists of three distinct phases which I call Reading, Reflecting, and Reacting.³ These 3 Rs, which I believe constitute the transferable skills basic to continual learning and development outside of the school setting, can be characterized as follows:

1. Reading. This step focuses on the development of skills needed to comprehend the subject under study (e.g., a social situation, an aspect of one's culture, a historical event, a political opinion,). The subject matter may be presented to the student in the form of a photograph, a videotape, a set of printed matter, a real life enactment, a speech, etc. In what follows, we will assume that the topic is presented in the form of an article (or set of articles) about a particular topic.

On the first encounter with the assigned material, each student independently prepares a set of discussion notes containing:

- questions concerning ambiguities, confusions, etc. (i.e., things the student doesn't understand).

³Additional detail concerning each part of this section can be found in Appendices C-E.

- a summary of the authors' main idea(s) or message(s), as well as the authors' intent or motive (i.e., what is being said and why).
- a summary of the authors' recommendations (if any) and the implications of implementing them.

Many students find it helpful to outline the material or use highlighter and marginal notes. Regardless of their customary work habits, however, they should prepare a 1 or 2 page set of notes containing the questions and statements they want to discuss with their classmates.

Later, within a small group setting, the participants conduct a discussion based on their individual preparation notes and strive to reach a consensus about what the authors are saying and why. Also, they try to determine the practical implications of any author-made recommendations.

The sole purpose of this phase of the procedure is for each student to gain a clear understanding of what is being said (or what is going on) and why. Freire calls this activity "reading reality". This is a new experience for most students and its mastery requires real effort on their part. The difference between preparing for a discussion as opposed to a test is not initially obvious to them and old habits are hard to break.

COMMENTS:

- a. Students have become so used to preparing for tests that they initially find it difficult to do something else. They need to be reminded that notes made for test preparation are usually not very helpful in a discussion setting.
 - b. There seems to be a strong tendency among students to make value judgments and inject personal opinions at the outset of a discussion. Students must be reminded that they are to reserve judgment and refrain from stating personal opinions until stage 2 (Reflecting). It is very important that the group share a common understanding about what is being said and why before the reflection phase begins.
-

2. Reflecting. Once the students reach a common understanding of the materials under consideration, their next task is to reflect on what they have learned and to engage in a critical analysis of it. Therefore, each student must reexamine the material in light of the initial small group discussion and prepare a new set of notes consisting of:

- new questions about the topic
- new insights, evaluative statements, statements about the relationship between the present topic (or point of view) and others previously encountered within or outside the present course

- relevant past personal experiences.

These notes then become the basis for a second small group discussion in which the students collectively attempt to do a critical analysis of the material and to formulate specific recommendations based on their analysis. During this phase, the students not only have a chance to reflect on what they have read (or seen) and to express their point of view openly, but also have the opportunity to hear and reflect on the views of others.

Within the small group discussion context, each student has the opportunity to play two distinctly different types of roles:

- (a) group leader, which is assumed by each participant on a rotational basis. The responsibilities of this role include:
 - (1) monitoring the group's activities;
 - (2) managing the small-group discussion sessions;
 - (3) summarizing/reporting the deliberations of the group to the class as a whole.

- (b) contributing individual participant (collaborator). The responsibilities of this role include:
 - (1) contributing to the discussions on an equal footing with the other members of the group.
 - (2) preparing weekly reaction papers.

COMMENTS:

Many students have not had much practice in either role and initially may feel quite uncomfortable. For example, many students:

- a. are timid or shy, lack confidence, etc., and, hence, have difficulty in the leadership role. Encouragement helps!
- b. are reluctant to share ideas or ask questions; some have difficulty withholding judgment. These factors impede true collaboration among group members. Learning to do these things is important.
- c. are not disposed to seriously listen to the viewpoints of others; that is, to try to look at a problem or an issue from the perspectives of others. The development of this ability takes time.

-
3. Reacting. Finally, each group leader writes a summary of the group's discussion. All of the others are required to write a personal reaction to the topic under consideration and to identify ways in which the new knowledge acquired during the discussion experience can be applied to bring about, or at least help create, the conditions for meaningful change in a real world setting. The translation of idea into action is the culmination of this critical third step (which corresponds to the transforming stage of Freire's approach.)

COMMENTS:

- a. Group leaders do not write a personal reaction paper.
 - b. Initially, most students are reluctant to speak out in a large group setting. Often they feel that their ideas and questions are 'stupid' and they do not want to risk being ridiculed by their peers. Without instructor guidance, these sessions frequently turn out to be dominated by several loquacious students while the others "sit and listen" like they have done for so many years in so many lecture classes. Some useful strategies for overcoming this problem are presented in Appendix F.
 - c. Reaction reports can take many forms. A variety of formats should be acceptable in order to encourage creativity and imagination!. Two examples are a letter to the editor of a newspaper and a proposal for addressing a specific problem
-

All notes made in preparation for the small group discussions, notes taken during the discussions, recorded reflections and insights which occur between discussions, and the personal reactions and/or group summary reports are kept in the form of a written log which is submitted to the instructor following the conclusion of each topic. These notes reveal a great deal about student thought patterns, linguistic skills, questioning ability, etc., and when examined weekly,

provide a record of progress unmatched by conventional testing procedures and contain a great deal of useful diagnostic information.

During the large group meetings, group leaders are selected by the instructor to present their summaries to the class-as-a-whole for consideration and discussion. This stage can also be augmented by other activities such as the use of guest experts, inter-group debates, and role playing activities. (For more on this, see Appendix G.)

This 3-step procedure provides the students with a systematic way to approach problems and issues in a collaborative manner. As a result, many report that their feelings of isolation and distorted perceptions of reality are gradually replaced by feelings of cohesiveness, the development of trust and mutual respect, and a better appreciation of and tolerance for the diverse abilities, interests and points of view which exist within their peer group.

F. Pupil Evaluation and Grade Assignment

The most direct way to eliminate test anxiety, cramming, and other undesirable test-related habits and effects is to eliminate testing. This can be done very easily without loss of information on student progress and can actually result in a more complete picture of student growth during the course. Student logs, group participation and course projects contain a great deal of information about cognitive and affective growth and, hence, provide the data necessary for studying the development of student thought patterns, linguistic skills, questioning ability, and a myriad of other important characteristics as well as for continuously monitoring overall student progress.

Student grades are based on their oral and written work as it is represented in their (a) log notes, (b) small group participation, (c) fulfillment of small group leadership responsibilities, and (d) course project, which may be done individually or in collaboration with a small group of classmates. The reward structure (i.e., grading scheme) places a premium on effort, conscientiousness, creativity and imagination.

All feedback in the course should either be in a positive or questioning form. Errors, misconceptions and wrongheaded notions should not be the subject of instructor-generated criticism; instead, special effort must be made to

guide the students' ways of thinking. The use of written comments and questions in the log book as well as informal out-of-class individual discussions as appropriate. In my first attempt at implementing this scheme, the grade assignment procedure I adopted was based on four components, each judged on a pass/fail basis. The general scheme is shown below and should be read across to determine the requirement for each grade.

Figure 1. Experimental Component-Based Grading Scheme

	<u>Component</u>			
	<u>Attendance</u>	<u>Log</u>	<u>Group Participation</u>	<u>Course Project</u>
A	P	P	P	P
B	P	P	P	
Grade C	P	P		
D	P			

* P represents "pass"

As shown in the figure, this grading scheme is hierarchical in nature. In other words, any student who satisfied the attendance criteria qualified for a grade of D (bottom line). Above and beyond that, the student who satisfied the log book preparation requirement qualified for a grade of C (2nd line from bottom).

Satisfaction of the group participation requirements, both in terms of individual participation and leadership, qualified the student for a grade of B (3rd line from bottom), and finally, the satisfactory completion of a course project qualified the student for a grade of A (top line).

During this experimental trial, course projects (which required prior approval by the instructor before their undertaking) needed to satisfy only two criteria:

- (1) that the project be related to a theme discussed during the course.
- (2) that the student be willing to explain his/her project in public and state that it represented the very best that s/he was capable of doing. Students were allowed to choose any project format and the variety reflected both their enthusiasm and imagination. In the first tryout, described below, the project formats included: a collage, a survey of student television viewing habits, a videotape presentation showing the changing attitudes towards teachers represented in films and comics over a 20-year period, and a set of illustrations showing the different ways racism and sexism are treated in textbooks of different countries. Only one out of nearly a dozen projects conformed to a standard term paper format.

COMMENTS:

- a. Attendance in this context not only implies physical presence but the act of attending as well. An alert appearance, periodic relevant verbal participation, etc., are indications of satisfactory performance. Since the class leans heavily on discussion and one must be present in order to participate, a grade reduction formula based on number of absences is appropriate, for example, a reduction of 1 letter for each 2 (or 3) unexcused absences.

- b. Criteria for judging the Reading and Reflection notes in the log are difficult to specify because of the many different styles used and the heterogeneity of student knowledge. However, one can usually judge the relative seriousness of the student's efforts, especially after the first several weeks. Indications of reaction paper quality are easier to identify, for example: clear references to and paraphrases of source material information, focus, evidence of analytic thought, logic in the development of the reaction, presentation of one or more conclusions (or recommendations) following from the analysis presented.
 - c. Feedback concerning small group participation is provided by other students in the group. In addition, fulfillment of the leadership responsibilities (e.g., validation of log notes, reporting absences from small group discussions and oral (as well as written) summaries of small group activities) are relatively easy to judge.
 - d. Some students have recommended that projects be graded in a more conventional fashion to prevent the less serious student from just getting by. If this type of modification is used, a scheme based on peer evaluation seems most consistent with the general aims of the 3 Rs method.
-

G. First Tryout

The first attempt to use the 3 Rs method occurred during the Fall 1985 semester at the University of Delaware in a course entitled "Sociological Foundations of Education." The class had 48 students, mostly sophomores and juniors. Since the course was scheduled to meet three times per week, each class lasting 50 minutes, each of the three steps of the 3 Rs method was allocated to one of the weekly class sessions (i.e., Reading discussion on Monday, Reflection discussion on Wednesday, and Reaction session on Friday).

Orientation Phase

The first class of the semester was devoted strictly to matters of organization and explanation. The primary purpose was to acquaint students with the new procedure and the ways in which it differed from the more traditionally formatted courses they had been accustomed to taking.

The next three classes were used to run the class-as-a-whole through the 3 Rs method. As luck would have it, these three classes were in the same week and, hence, it was possible to show the students the sort of pattern they were expected to follow during the remainder of the semester.

At the end of the initial class meeting, which met on a Friday, the first article (A Nation At Risk) was assigned. This important and highly visible critique of public schooling in America provided a framework for the course-as-a-whole. The students were told that their primary goal for Monday's class was to read the article, to identify the main ideas, and to raise questions about any points of ambiguity. In addition, they were told to think about the implications of recommendations made in that report should those recommendations be put into effect immediately. This work was to constitute the first portion of their log entry for that week.

In Monday's class, we discussed the work they had done over the weekend with an aim towards helping the students clarify what their task was to be in the remaining weeks. Needless to say, it was very difficult to generate a discussion in a class of 48 students. Nevertheless, a variety of procedures were used to engage as many students as possible in the initial discussion. Near the end of this first class meeting, the students were again told what the goal was for their next meeting. In short, it was to reread the article, to do a critical analysis of its content, to evaluate its criticisms and recommendations in light of their own personal past and present schooling experiences as well as

their knowledge and perception of schooling, and to make value judgments about the validity of the reports claims and recommendations.

In Wednesday's class, students were asked to read entries from their log notes aloud. Both the form and substance of these notes were discussed. The emphasis at this time was on the structure of their notes and on strategies for improving them. At the end of Wednesday's class, the task for Friday was reviewed. In particular students were told to write their own personal reactions to A Nation At Risk report. As in the previous stages, they expressed a great deal of uncertainty about what was expected of them. Being unaccustomed to this procedure, they were not quite sure what the instructor wanted. Hence, a major task was to convince the students that their focus should not be "what the instructor wants", but rather a personal reaction to the article as a whole (its content and/or its tone) or to a subset of the ideas in the article. They were told to choose something that they felt was important and to react to that in a well-reasoned, yet personal way. For those having difficulty in deciding how to handle this reaction, it was suggested that something in the form of a letter to the editor of the student newspaper would be suitable, as would any other format which would help them focus their efforts.

Friday's class session was spent listening to a sample of student reactions followed by short discussions. Needless to say, only a brief amount of time could be spent on each reaction presentation, and only a few presentations were possible given the number of students and the amount of time available. Nevertheless, a surprising variety of reactions focusing on different aspects of the A Nation At Risk report were presented. As a result, students were able to see the wide range of acceptable products which could be produced based on this one article.

Near the end of the class, students simply counted off from 1 to 8 in order to obtain a group assignment for the following week. Eight groups of six students each were constituted in this fashion. Each group was assigned an area within the building where they were to meet each Monday and Wednesday for their small group discussions. They were reminded that they were to choose a group leader at the beginning of each topic and that this leadership responsibility was to be assumed by each on a rotational basis. That is, each week the members of the group decided who would be the leader for that particular set of discussions. Finally, they were given their second article which embodied an attempt to respond to several of the criticisms and recommendations in the A Nation At Risk report.

The students were told that the A Nation At Risk article would provide the framework for the entire course and its discussions. In fact, the first half of the course was devoted to considerations of a number of specific elements in this report dealing with matters such as passing and graduation standards, teacher and student quality, textbook quality and adoption procedures, etc. Although not discussed at this time, the articles in the second portion of the course were to deal with topics which went beyond the A Nation At Risk report, (i.e., articles which dealt with important educational themes not explicitly attended to in the A Nation At Risk report, e.g., character education, the introduction of controversial topics into the curriculum, distortions of reality).

Cycle 1

Beginning with the second full week of class, the students met each Monday and Wednesday in their small group settings to deal with the reading and reflection steps of the procedure, respectively. Each Friday, the class assembled as a whole in order to hear and discuss group summary reports (presented by the group leaders), to participate in debates on certain issues, or to listen to guest speakers provide a 20 to 30 minute presentation on the topic of the week followed by an informal question-and-answer period.

Cycle 2

Once all of the students had had an opportunity to serve as leader within the small group setting, the groups were constituted anew for the second portion of the course in order to expose each to a broader sample of viewpoints. Rather than use a haphazard scheme at this point, the information available on each student's ability and progress was used to maximize group heterogeneity. Since it was possible with this number of students and groups to guarantee that no two students would appear in the same group during the second half of the semester as the first half, the students were forced to begin anew in developing and/or refining their interpersonal group activity skills and to generalize the use of these skills beyond the original context in which their development began.

EXPO 258

During the final week of the semester, student projects were presented to the class-as-a-whole. This period, called EXPO 258 (the course number being 258), was the culmination of the semester's work.

Schematically, the division of the semester is shown below.

- Class 1 - overview of course and explanation of procedure.
- Week 1 - demonstration of 3 Rs procedure in class-as-a-whole; instructor serving as leader.

- Weeks 2-7 - Cycle 1: small group work; different group leader (within each group of 6) for each topic.
- Weeks 8-13 - Cycle 2: new groupings of students; same pattern as Cycle 1.
- Week 14 - EXPO 253: project presentations.

Topics and Speakers

The topics and source materials for the course are shown in Appendix A. Since the content of the course was never regarded as fixed, reading assignments were literally made on a week-to-week basis with new articles being added to the original list where it seemed appropriate. Newspaper and magazine articles as well as articles from professional publications like the Phi Delta Kappan and other professional journals were inserted. One of the things that seemed worthwhile was to invite speakers with special knowledge about selected topics to meet with students periodically throughout the course. It was not clear exactly how these people ought to be used or whether their presentations should precede or follow the small group discussions. I decided to have their presentations follow the relevant small group discussions so that students would have ample time to prepare and thereby be able to take maximum advantage of each speaker's expertise. Fortunately, a wide variety of interesting speakers were available including Dean Frank Murray (student competency testing), Dr. Rita Fillos (career ladders and merit pay), Dr. Richard Venezky (construction of basal readers), Mr. Miguel

Ernesto Vijil (education in Nicaragua), Mr. William Hutchinson (teaching about nuclear war) and the late Mr. W. L. Gore (principles of successful management). Of course, other possibilities exist and deserve careful consideration.

Student Reactions

As indicated earlier, most of the students had never had the sort of experience offered by this procedure. It soon became obvious that many had spent most of their prior school time in lecture-type courses, where their progress was measured largely with midterm and final multiple-choice examinations along with occasional brief essay questions and term papers. Their behavior in the initial set of classes betrayed the fact that many of them were habitual nonvolunteers in group discussion settings, and that many lacked either the confidence or the ability to assume a leadership role within a group discussion setting. The extent to which they had been conditioned to the standard schooling experience was revealed by their actions in the large group discussions at the beginning of the course as well as their many uncertainties in the early small group meetings. The absence of tests, the requirement to prepare notes in writing for every class, the emphasis on effort and critical analysis in the small group setting with the instructor present only occasionally, etc.

were all very unsettling ideas to the students. Even as late as the halfway point in the course, some students still occasionally asked what the catch was. It took some of them a long time to believe that the instructor was on the level and to appreciate the advantages they were enjoying with the burden of examination preparation eliminated. Nevertheless by the 3rd week, it was possible to sense the beginnings of a change in how the students viewed their roles and responsibilities within this format, and to sense the development of excitement and spontaneity, as well as the unleashing of a creative energy from this new found "freedom to learn".

Each student who participated in this activity had a unique and worthwhile experience which, in my view, would be worth describing. Some students, shy and reserved at the outset of the course, blossomed into real leaders; many students began to spontaneously seek information about topics under discussion elsewhere, e.g., the school district central office, the curriculum collection of the university library, the library and personnel at the International Reading Association, and university faculty with expertise in particular areas. Some sought out teachers in public schools or fellow students at various levels. Several even subscribed to the Phi Delta Kappan. Perhaps the most dramatic change came in a young woman who, after the first four weeks of class, came into my office and broke down

completely. After listening to the discussions within her group and in the Friday large group meetings, she said she felt stupid. She thought her classmates had such good ideas and expressed them so well and couldn't understand why she wasn't able to do the same. We spent about an hour talking about individual differences in knowledge, rates of progress, thinking patterns, etc. We talked about areas in which she excelled, (e.g., swimming) where her classmates did not, as well as her background, the things that caused her to be the way she is, and what could be done to become a more active and constructive participant within this format. Prior to the subsequent class, she came into my office and said that she was really prepared and that she was going to ask at least one question during the coming class period, which she did. Little by little through the remainder of the course, the quality of her participation within the small group setting and the quality of her work as reflected in her log improved steadily. By the end of the course, it seemed to me that she had demonstrated more personal growth than any other student in the class. This is not to say that her work was superior in quality to the work of all of the other students; it was not. However, given her starting point in the class, it seemed to me quite clear that she was taking more away from the experience than any other student in the group. Furthermore, while her attention (like that of other students) was not focused

on the acquisition of specific information in the course, it was clear that she became increasingly knowledgeable and able to discuss the wide variety of issues that we had entertained during the semester.

As I said earlier, there are many other stories which can be told about student growth in this class. The experience of reading through student logs, observing small group discussions, and moderating the large group discussions each Friday helped me to know these students much better than any group I had ever worked with in the past. The time spent reading the weekly logs and participating in the discussions, rather than lecturing and testing, allowed me to understand what the students brought to the class and how they changed over the course of the semester in a way not possible through the traditional type of format. In general, student log notes and reaction papers provide a clear picture of their misconceptions, limited perspectives, misreadings and misinterpretations of course materials, as well as the flaws in their writing skills. As a result, the weekly logs are a rich source of feedback information.

Evaluation

After five weeks of the course, a preliminary formative evaluation form (see Appendix B.1) was distributed to the students. At the end of the course, a team of four students who volunteered to do a course evaluation as their project, designed an interview schedule (Appendix B.2) which they used in talking to about 3/4 of the students in the class. To highlight some of the elements of their report, the following items are offered:

1. 96% of the students said that the format of this course increased their ability to analyze issues
2. 92% indicated that it increased their ability to understand and analyze different points of view
3. 93% said they would in all likelihood attempt to use this format sometime in the future
4. 93% said the experience helped to define and focus their personal points of view on many issues
5. 71% indicated that they had benefited from at least one of the speakers
6. 69% indicated that they had done further research on at least one topic
7. 69% indicated that they liked the component grading system while 17% expressed preference for a procedure based on quality of each item produced
8. On a four point scale, the method and mix of topics got an average rating of 3.7, while the log preparation exercise and the grading scheme fell at about 3.3
9. Greatest interest was expressed in topics dealing with curriculum; topics dealing with structural matters came in second.

10. Students listed more advantages than disadvantages to the mid-semester group reassignment. Advantages were exposure to new viewpoints and opinions, opportunity to meet more classmates, and the benefits of a fresh start. Disadvantages included discomfort, missing the old group, and disruption of the flow and harmony developed in the initial small group.

The overall conclusion of the evaluation team was "the results indicate an overwhelming enthusiasm not often present in an entire class towards the close of a semester. Perhaps the methods employed here stirred student thinking and enthusiasm and will result in a greater involvement in the many facets of education."

An independent course evaluation (Appendix B.3) conducted by the Department of Educational Studies at the end of the semester revealed that 2/3 of those responding gave the course a rating of five on a five-point scale and only 2 of the students assigned a rating below the scale midpoint. In addition, an examination of student comments made on the free response portion of the form indicated an overwhelming acceptance for the 3 Rs method of instruction. Based on an analysis of the comments made by students during and at the end of the course, it seems fair to say that the initial implementation of the method was a resounding success.

H. Discussion

The reasons for the apparent initial success of this method, in my opinion, include those listed below:

1. The focus on motivation. The content of the course was composed of interesting, relevant and engaging topics and questions. For example, the article which established the framework for the course as a whole was A Nation At Risk which roundly criticized the state of public education and referred to its products in very negative terms. An immediate reaction from most of the students was "are they talking about us? Are we incompetent?" A second example, which was included in the second half of the course concerned problems associated with the introduction of controversial materials into the classroom. The bases for this discussion were:

- (a) a group of articles dealing with nuclear war and
- (b) a presentation by a Delaware school teacher who attempted to introduce the "Choices" nuclear war unit materials in his social studies classes several years ago and was prevented from doing so by the district's administration.

2. The adoption of positive assumptions about students and the ways they would respond in a "free" environment. I assumed that most students would work closer to their maximum than to their minimum if interesting and

relevant topics were involved. The wide variety and the quality of student course projects as well as the level and quality of student involvement throughout the semester convinced me of the reasonableness of this approach. Despite the fact that the grade components in the course were all judged on a pass/fail basis and that the criteria for satisfying each component seemed reasonably easy to meet, many students reported that they had never worked so hard on a course in their entire college careers.

3. The abandonment of the notion that course content is "stuff to be covered". The view taken is that the way in which students interact with the content is of paramount importance and that the specific topics covered, the manner in which they are encountered, and the sequence of their appearance is of secondary importance. I felt that flexibility was extremely important so that the course could be tailored to the interests of the class as it proceeded. An important benefit of this flexibility is that it allows the instructor to take advantage of opportunities as they arise. An example of this was the early inclusion of materials on adult literacy and a guest appearance by

Mr. Miguel Ernesto Vijil (Minister of Housing in Nicaragua) who talked about the educational requirements of national reconstruction in his country.

4. The use of a simple, systematic procedure which offers very little opportunity to disengage. Once understood, the three steps in the 3 Rs procedure provides a systematic way for students to approach a topic and prepare for intelligent discussion of that topic with their peers. In addition, the log notes provide a systematic way for both students and instructor to monitor the weekly activities. Since the log notes are validated at each class meeting by the group leaders and read each week by the instructor, the students have very little opportunity to coast or to take periodic vacations from their work.

5. The emphasis on effort, creativity, imagination and initiative instead of the accumulation of facts, principles and formulas. In this approach, the students focus most on the transferable skills (e.g., oral and written expression, leadership and collaborative skills, systematic work habits, adoption of multiple perspectives) instead of the "traditional content"

orientation, which in this method becomes part of the incidental learning activity. That is, students appear to learn a lot of what traditional tests measure while not always being aware that that learning is taking place.

6. The minimization of anxiety provoking features. Initial unfamiliarity with this approach does produce feelings of confusion and anxiety; however, as the students become accustomed to this format, this problem vanishes. This is especially true when one evaluation scheme does not use any tests or involve any open public criticism of student ideas as in the first tryout.

7. Beginning with the concrete and moving towards the general. Each topic in the course began with a specific, concrete, important question or problem for the teaching profession. Even though the participants in the class had never been full-time classroom teachers, they seemed to have very little difficulty in identifying with these problems and in recognizing how these problems would affect them in the future.

8. The acknowledgement and accommodation to individual differences. In this format, one accepts the students as they arrive and sets realistic demands for them. In the traditional format, all students are expected to meet the same absolute criteria for the various letter grades. This is grossly unfair since the student arriving at the course with the poorest background or the weakest abilities is expected to do the most in order to obtain a specific grade. In this format with the pass/fail component evaluation, each student is judged in terms of his/her individual progress. Therefore, it becomes possible for every student to earn an "A" in the course.
9. An emphasis on the identification and refinement of important questions rather than a search for "the only or the best" answer. As students progress, they soon begin to realize that "real world" problems and issues are quite complex and, more often than not, their discussions and debates result in the identification of more questions rather than simple, straightforward solutions. This can be very disconcerting and takes a

bit of getting used to; however, it is one of the things that students seem to really appreciate once they get the hang of it.

10. A greater sense of accomplishment on the part of the instructor. Instead of planning lectures and constructing exams, instructors use the bulk of their time observing small group discussions, moderating the large group meetings, advising students and evaluating their products (logs, group participation and course projects). Although the 3 Rs method may require more of the instructor's time than the conventional lecture approach⁴, the increased interaction with and observation of the students results in new insights regarding:

- (a) patterns of student development--based on direct observation of individual differences and their impact on affective and cognitive growth.
- (b) the subject matter--based on the constant exposure to new and oftentimes imaginative ways of viewing a topic generated by the students.

⁴The amount of extra time depends on the number of log submissions required and the amount of extra consultation with students stimulated by the evaluation scheme used and the type of feedback provided.

- (c) one's personal biases--based on the continuous informal testing of one's preconceptions about individual student abilities and shortcomings against the wealth of student performance data to which there is constant exposure.

This new learning about the students, the subject matter and oneself if viewed in a positive way by the instructor can be both an enriching and invigorating experience, resulting in more frequent and positive contact with the students.

Perhaps the key element that binds all of these items together is realism. That is, the 3 Rs format seems to provide students with a reasonably effective strategy for engaging in the kinds of activities that will constitute most of their future professional lives. That is, much of what they do will (or should) involve the identification of and an attempt to solve problems in collaboration with their peers; hence, the emphasis on small group peer discussion. The importance of the 3 Rs procedure as a general problem solving strategy is the systematic three step procedure which moves group discussions very quickly away from the "blind leading the blind" approach seen in many discussion format situations to a genuine collaborative problem-solving effort.

I. Some Questions and Answers

It should be pointed out that a number of questions have been raised by colleagues concerning the quality of work done by the students in a course conducted in this fashion. The most prominent are the following:

1. How do you know that the students are doing their own work? The answer to this, of course, lies in their log preparation notes, their participation in both the small and large group discussions, and their project work. Students must produce so much during a one semester course that it is much more difficult for them to avoid doing their own work than it is in a more traditional course where student performance is evaluated on the basis of several examinations and a term project. Although continual use of the same materials can, over time, give students the opportunity to use 'old notes,' my guess is that this will not be a significant problem because of the overt participation required by this method.

2. How do you know that they are learning the really important stuff (e.g., facts, principles, concepts)? It seems to me that in many conventional classes, most of the students spend a great deal of their time preparing for examinations. In doing this, they play the game of anticipating what the instructor wants and will ask on the exam. This provides the motivation and strategic basis for the way in which they study and incorporate the information in their mental storage. In my experience, students who study this way frequently can't answer the same kinds of questions that appeared on their exam as little as one month following that exam. That is, their study habits are characterized by memorization, cramming and, in some cases, cheating. No wonder there seems to be little transfer of learning to other courses or to realistic settings. The extent to which facts, principles, etc. are learned in the current format is difficult to quantify at the moment, since no examinations of the traditional type have been given. However, based on examinations of student log notes and consideration of the group discussion content, it seems that this format results in a better integration of the information that they acquire into their knowledge base.

3. Do 3 Rs students learn as much as students in a traditional format? In order to answer this question we would need to define the objectives of instruction and to develop a set of measures of each objective which would allow this determination. If the question is, "do 3 Rs students learn as much of the stuff that is measured by traditional tests (which are usually arbitrary and idiosyncratic--depending upon which instructor is teaching the course and making up the exam), the answer is "we don't know." However, we should also ask whether the students in the traditional classes develop as much in the areas of oral and written expression, creativity and analytical thinking; or acquire attitudes which will lead to continued study and learning in the same area, or experience an improvement in self-concept, leadership skills, and a tolerance for others' points of view? Oxford and Cambridge Universities, both prestigious institutions of higher learning, use tutorial systems which have as their primary objective teaching students how to think. There are no behavioral objectives, mastery tests, multiple-choice examinations, or any other of the trappings of the more traditional university and public school settings with which we are familiar. It seems to me

that the primary goals of schooling in a pluralistic and democratic society should be to promote the kind of human development which releases the creative and productive potential of all students. I believe that the 3 Rs format offers more promise in doing that than the more prescriptive and restrictive formats found in the majority of our classrooms.

As a final note, it seems clear that a great deal of research is necessary to determine exactly what kinds of development and learning styles are promoted by the 3 Rs method as well as the extent to which this method is applicable to different subject matters, age levels, student and teacher personality types, etc. It is my hope that individuals in various areas will attempt to use this procedure so that we can begin to formulate answers to these questions.

REFERENCES

- Bloom, B. (ed.) Taxonomy of Educational Objectives, Handbook I: Cognitive Domain. New York: David McKay, 1956.
- Brown, C. Literacy in 30 Hours: Paulo Freire's Process in Northeast Brazil. Alternative School Network, 1978.
- Freire, P. The Politics of Education. Mass: Bergin & Garvey, 1985.
- Illich, I. Deschooling Society. New York: Harper & Row, 1970.
- Johnson, D.W. & Johnson, R.T. Conflict in the Classroom: Controversy and Learning. Review of Educational Research, 1979, 49(1), pp. 51-70.
- Krathwohl, Taxonomy of Educational Objectives, Handbook II: Affective Domain. New York: David McKay, 1956.
- Miller, V. Between Struggle and Hope: The Nicaraguan Literacy Crusade. Boulder, Colo.: Westview Press, 1985.
- National Commission on Excellence in Education. A Nation at Risk: The Imperative for Educational Reform. Final Report issued in 1983.
- Ohanian, S. Huffing and Puffing and Blowing the Schools Excellent. Phi Delta Kappan. Jan., 1985.
- Slavin, R. Cooperative Learning. N.Y.: Longman, 1983.
- Webb, N. Student Interaction and Learning in Small Groups. Review of Educational Research, 1982, 52(3), pp. 421-445.

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APPENDIX A - FIRST TRYOUT

A.1 Course Outline

A.2 Focus Questions and Source Materials

EDS 258-Sociological Foundations of Education
Fall, 1985

Victor Martuza
213H-Willard Hall
Phone: 451-1637
Office Hours: MWF 11:00-11:30

I. Introduction. During the past several years, the debate about the quality of American education and the proper role of the public schools in a rapidly changing world has intensified considerably. In this course we will examine specific issues and problems which have been key elements in this ongoing controversy, attempting to identify the roots of the current discontent, to understand the various perspectives fueling the debate, and to critically examine reform proposals to change and their potential for producing both positive and negative effects.

II. Content. Each week's activities will be based on the contents of one or more articles which deal with a specific aspect of the debate. We begin with the report of the National Commission on Excellence in Education and, in subsequent weeks, we will examine various points raised in this and similar documents in detail as well as a number of important factors seemingly overlooked. Some of the questions we will consider are:

- (1) Is there really a crisis in American education?
- (2) What is the proper focus of American public schooling?
- (3) What should be taught in school?
- (4) What standards are appropriate for pupil promotion and graduation?
- (5) How and by whom should curriculum materials be chosen?
- (6) In what ways do economic and political forces shape the educational agenda?

The assigned readings will be distributed in class on Friday of each week with payment of \$25.00 for the complete set made to Judy Hubbard in room 219 WHL by Friday, Sept. 20.

III. Method. The primary method used in this class is small group discussion. Each study/discussion group member is expected to participate fully and to assume responsibility for group leadership on a rotational basis.

The basic approach to dealing with each set of materials includes 3 steps: Reading, Reflecting and Reacting. Specific guidelines for each of these steps will be provided by the instructor.

Group discussion results will be reported orally to the class as a whole and will serve as the basis for a general discussion of that week's topic. Written versions will also be submitted to the instructor at this time.

A.1
Course Outline

IV. Student Responsibilities:

- 1) A written, daily log containing:
 - a discussion preparation outline (before 1st class)
 - reflections, insights, questions related to the readings as well as links to previously read material (~~daily~~) (before 2nd class)
 - 1-2 page reaction papers (~~at end of last class devoted to the topic~~) (due at 3rd class meeting)
- 2) Active, constructive participation in a study/discussion group with responsibility for group leadership on a rotational basis.
- 3) A significant individual (or group) course project approved in advance by the instructor. Deadline for project proposals: Friday, November 7 October 31.

V. Grades: Each of the following components is judged on a pass/fail basis. Grades are awarded as follows:

		<u>Component</u>		
		Log Book	Group Participation	Course Project
A	P	P	P	P
B	P		P	
Grade C	P			
D		----- Attendance -----		

** Each pair of unexcused absences results in the reduction of course grade by one letter.

TOPIC NO.

FOCUS QUESTIONS & RELATED READINGS

Focus Questions
& Some MaterialsIntroduction

1. Is there a crisis in American education?

A Nation at Risk: The Imperative for Educational Reform.
Final Report of the National Commission on Excellence in
Education, 1983.

Curriculum Issues

2. What is the nature of the public school curriculum and how can it be improved?

Daniel P. Resnick & Lauren B. Resnick. Standards Curriculum and Performance: A Historical and Comparative Perspective. Educational Researcher, April, 1985.

3. How are textbooks chosen for public school use?

Arthur S. Trace, Jr. What Ivan Knows That Johnny Doesn't. New York: Random House, 1961. (Ch. 1 Readers and the Teaching of Reading in Soviet and American Schools)

Roger Farr & Michael A. Tully. Do Adoption Committees Perpetuate Mediocre Textbooks? Phi Delta Kappan, March, 1985.

Harriet T. Bernstein. The New Politics of Textbook Adoption. Phi Delta Kappan, March, 1985.

Calif. Science Text
1950's
- NY Times
- Newsweek etc

Spoken -
Duke University
Publishers' 'Rules'
& Procedures in
deciding what to
publish.

The Problem of Standards

4. What is the proper role of tests and examinations in setting passing and graduation standards?

Daniel P. Resnick & Lauren B. Resnick. Standards, Curriculum and Performance: A Historical and Comparative Perspective.

George F. Madaus. Test Scores as Administrative Mechanisms in Educational Policy. Phi Delta Kappan, May, 1985.

George F. Madaus & Vincent Greavey. The Irish Experience in Competency Testing: Implications for American Education. American Journal of Education, February, 1985.

Teacher Quality

5. What are the likely effects of mandatory teacher competency testing on teacher quality?

Arnold M. Gallegos. The Negative Consequences of Teacher Competency Testing. Phi Delta Kappan, May, 1984.

Donald Kauchak. Testing Teachers in Louisiana: A Closer Look. Phi Delta Kappan, May, 1984.

**A Guide to the NTE Core Battery Tests. Prepared by ETS for the NTE Policy Council, 1983. (NOT INCLUDED IN PACKET)

6. Are alternative teacher preparation models and/or the promise of career ladders more likely to attract more able people to the teaching profession?

Saul Cooperman & Leo Klagholz. New Jersey's Alternative Route to Certification. Phi Delta Kappan, June, 1985.

W. Timothy Weaver. Solving the Problem of Teacher Quality, Part 2. Phi Delta Kappan, Nov., 1984.

Susan M. Johnson. Merit Pay for Teachers: A Poor Prescription for Reform. Harvard Educational Review, 1984.

Or, is the profession itself the major obstacle to attracting as well as retaining the best and the brightest?

Albert Shanker. The Revolution that's Overdue. Phi Delta Kappan, Jan., 1985.

Structural Features

7. To what extent can changing certain structural features of public schooling bring about the desired improvements in the quality of American education?

A. Borrowing from others

Nobou K. Shimahara. Japanese Education and its Implications for U. S. Education.

Arthur S. Trace, Jr. What Ivan Knows That Johnny Doesn't (Ch. 6: Conclusions and Recommendations)

B. Expanding Opportunities to Choose Among Schools

Hilton Friedman. The Voucher Idea. New York Times Magazine, Sept. 23, 1973.

Chris Pipher. Student Choice: The Return of the Voucher. Phi Delta Kappan, March, 1985.

Debate Topic
 N.Y. Times
 Piece - Baltimore
 Washington Post
 Albert Shanker
 A National Teacher
 Examination
 Educ. Measurement
 Fall, 1985

Career Ladders in Del
 Ruth Filler -
 Ralph Moyer (News
 Journal)

+ Susan O'Brien
 Hitting and Puffing
 and Glowing Schools
 Excellent. Phi Delta
 Kappan. Jan., 1985
 Speake - White & Green

Russell I. Thackery. Some Things You May Want to Know About Tuition Tax Credits. Phi Delta Kappan, Sept., 1984.

Linda Darling-Hammond & Shiela N. Kirby. Tuition Tax Deductions: What They Mean to the Parents. IFG Policy Perspectives, Winter/Spring, 1985.

Joe Nathan. The Rhetoric and Reality of Expanding Educational Choices. Phi Delta Kappan, March, 1985.

C. Creating Schools Based on Special Interests/Abilities

Denis P. Doyle & Marsha Levine. Magnet Schools: Choice and Quality in Public Education. Phi Delta Kappan, Dec., 1984.

Rolf K. Blank. The Effects of Magnet Schools on the Quality of Education in Urban School Districts. Phi Delta Kappan, Dec., 1984.

D. Dismantling the Public School System

Illich, I. After Deschooling, What? Social Policy Sept./Oct., 1971.

BEYOND THE COMMISSION REPORT

Education and Values

8. What is the responsibility of the schools regarding the teaching of values?

E. Dale Davis. Should the Public Schools Teach Values? Phi Delta Kappan, Jan, 1984.

William E. Collie. Schemp Reconsidered: The Relationship Between Religion and Public Education. Phi Delta Kappan, Jan, 1984.

Jean B. Raffe. Television: The Newest Moral Education? Phi Delta Kappan, Nov, 1983.

Stanley M. Elam. Anti-Democratic Attitudes of High School Students in the Orwell Years. Phi Delta Kappan Jan, 1984.

Education, Literacy & Politics

9. What are the tolerable limits to educational reform in America?

A. Adult Literacy and Political Participation

Robert F. Arnove. The Nicaraguan National Literacy Crusade of 1980. In Comparative Education, Philip G. Altbach et al. (eds.), New York: Macmillan, 1982. Ch. 22.

*D. H. Long
Soviet Education & the
development of values
FDK March, 1984*

*What was our
freedom's interest?
Sunday Forum, News J
Sun, Sept 29, 1985*

Edward H. Bemer. Educational Underdevelopment in Kentucky.
In Comparative Education, Ch. 19.

B. Controversial Issues

Ira J. Winn. Cold-War Echoes in American Children. Phi
Delta Kappan, Dec., 1984.

John E. Mack. Resistances to Knowing in the Nuclear Age.
Harvard Educational Review August, 1984.

Fleisher, P. Teaching
Children About Nuclear
War. Phi,
Nov. 1985.

Leferer, E. W. Teaching
History and Politics in
the Age of Nuclear Arm
Phi Nov, 1985.

Musical Video #19

C. Distortions of Reality

* social studies texts

* mass media

* popular art forms

--films

--music/video

Education & Equality

10. What are the limits and probabilities of education for solving long standing social problems?

A. Racial/Ethnic Equality

Diane Ravitch. Race and Education: Social Science and the Law. In The Troubled Crusade. New York: Basic Books, Ch. 5.

John V. Ogbu. Equalization of Educational Opportunity and Racial/Ethnic Inequality. In Comparative Education, Ch. 15.

Debate on
Bilingual Education
Analysis
Sept 29, 1985

B. Sexual Equality

Hollie S. Rosenhan. Images of Male and Female in Children's Readers. In Women in Russia by Dorothy Atkinson et al. (eds.), Stanford U. Press, 1977.

Gari W. Lapidus. Sexual Equality Through Educational Reform: The Case of the U.S.S.R. In Comparative Education, Ch. 14.

Locus of Control

11. Where is the real locus of control of the public schools and does it matter?

Renegotiating Society's Contract with the Public Schools.
Carnegie Quarterly, Fall, 1984/Winter 1985.

Michael G. Killian. Local Control--The Vanishing Myth in Texas. Phi Delta Kappan, Nov., 1984.

Joel Spring. Education and the Sony War. Phi Delta Kappan, April, 1984.

Debate on
Bilingual
Education

EDS 258 Recommended Books

A Guide to the NTE Core Battery Tests. Prepared by ETS for The National Teacher Education (NTE) Policy Council, 1984.

Adler, M. J. The Paideia Proposal. New York: MacMillan, 1982.

Altbach, P. G., Arnove R. F., & Kelly, G.P. (EDS) Comparative Education. New York: Macmillan, 1982.

Boorstein, D. Democracy and its Discontents. New York: Vintage Books, 1975.

Boyer, E. High School: A Report on Secondary Education in America. New York: Harper & Row, 1983.

Brofenbrenner, U. Two Worlds of Childhood: U.S. and U.S.S.R. New York: Russell Sage Foundation, 1970.

Croghan, M. J. & Croghan, P. P. Ideological Training in Communist Education: A Case Study of Romania. Washington, D.C.: University Press of America, 1980.

Fagen, R. R. The Transformation of Political Culture in Cuba. Stanford, CA: Stanford U. Press, 1969.

Freire, P. The Politics of Education. South Hadley, MA: Bergin & Garvey, 1985.

Freire, P. Pedagogy of the Oppressed. New York: Herder & Herder, 1970.

Goodlad, J. I. A Place Called School. New York: Harper & Row, 1983.

Hofstadter, R. Anti-Intellectualism in American Life. New York: Vintage Books, 1967.

Hurn, C. J. The Limits and Possibilities of Schooling. Boston: Allyn & Bacon, 1978.

Kirk, G. Curriculum and Assesment in the Scottish Secondary School. London: Ward Lock Educational, 1982.

Kozol, J. Prisoners of Silence. New York: Continuum, 1980.

National Commission on Excellence in Education. A Nation at Risk. Washington, D.C.: U.S. Gov't Printing Office, 1983.

Rabin, A.I. & Hazan, B. Collective Education in the Kibbutz. New York: Springer, 1973.

← Miller, V. Between Struggle and Hope: The Nicaraguan Literacy Crusade. Boulder: Western Press 1985

- Ravitch, D. The Troubled Crusade: American Education 1945-1980. New York: Basic Books, 1983.
- Rohlen, T.P. Japan's High Schools. Berkeley: U. of Calif. Press, 1984.
- Sizer, T. R. Horace's Compromise: The Dilemma of the American High School. New Haven: Yale Univ. Press, 1984.
- Trace, A. S. What Ivan Knows that Johnny Doesn't. New York: Random House, 1961.
- Zajda, J. I. Education in the U.S.S.R. New York: Pergamon Press, 1980.

Recommended Videotape

To Save Our Schools, To Save Our Children. ABC News closeup, Sept. 4, 1984. Show #123. (A 3-hour television program which looks at various aspects of the crisis in American public education.)

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APPENDIX B - FIRST TRYOUT

B.1 Formative Evaluation Form

B.2 Course/Instructor Evaluation

B.1 Formative Evaluation Form

(Course Title)
Formative Evaluation

Course Outline No. _____
Date _____

The only purpose of this form is to get a sense of how you feel things are going at this stage of the course. DO NOT PUT YOUR NAME ON THIS FORM.

I. Describe each of the following course elements using the 2 most appropriate adjectives (in their order of importance).

1. Monday discussions _____
2. Wednesday discussions _____
3. The source materials _____
4. The issues discussed _____
5. Your group _____

II. A. Estimate to the nearest 1/2 hour the amount of time you spent on this week's topic preparing for the:

Monday Class _____ Wednesday Class _____ Friday Class _____

B. What % of your study time this week did you use for this class _____ %.

III. Compared to classes run in a traditional format, would you say that this class:

- 1) Requires more or less effort? _____
- 2) Results in more or less learning? _____
- 3) Produces deeper or shallower understanding? _____
- 4) Stimulates your thinking more or less? _____

IV. Briefly answer each of the following questions.

- 1) What is the most interesting issue your group has discussed so far? _____
- 2) How would you grade your group (A,B,C,D or F) on each of the following items?
 - a. staying on topic _____
 - b. adherence to format _____
 - c. evenness of participation _____
 - d. tolerance of views _____
- 3) What do you like best about this class format? _____
- 4) What do you like least about this format? _____

V. Additional comments may be written on the back of this sheet.

B.2 Course/Instructor Evaluation

Course Title _____
Course/Instructor Evaluation _____

Course Outline No. _____
Date _____

This form is used to obtain a continuous evaluation of the course and the instructor. For each, specify the grade you feel is most appropriate (A, B, C, D, F) and your reason(s) for that grade assignment. DO NOT PUT YOUR NAME ON THIS FORM.

1. Course Grade _____

Reason(s):

2. Instructor Grade _____

Reason(s):

APPENDIX C - THE LOG BOOK

A. READING

1. Length: 1-2 pages. Regardless of the amount of source material included in the assignment, the log notes for this stage must be condensed to serve as a useful guide for discussion.
2. Content: The notes should contain:
 - a. The main idea, message or theme expressed or represented in the source material and its underlying motive. [In the case of a visual representation (i.e., foto, film or video), it may be more appropriate to describe what's happening.]
 - b. Questions about things not clearly understood (e.g., terms, concepts, ambiguities, confusions, etc.).
 - c. Implications of any author-made recommendations in the case of a written material; likely outcomes of the continuation of a sequence of events in the case of a film or video, etc.
 - *d. Opinions and evaluative statements are strictly prohibited at this stage.
3. Validation: At the beginning of the discussion session, the group leader signs his/her name immediately below the last recorded note. This activity is an important responsibility of the group leader.
4. Additions: Anything which occurs during the discussion can be added to the log notes below the signature of the group leader. This "added material" should be labelled as Class Notes.

5. Evaluation Criteria: (to be added)

B. REFLECTING

1. Length: 1-2 pages as above.
2. Content: These notes should be based on the individual's analysis of the source materials. It should contain:
 - a. new questions about the topic.
 - b. statements and/or questions about the wisdom or value of what was said, recommended, or happening (visual sequence).
 - c. statements about the relationship of the element of (a) above to the student's personal past and present experience.
 - d. alternatives to what is said, proposed or portrayed in the source materials and the reason(s) for proposing them.
3. Validation: Identical to part A.
4. Additions: Identical to part A.
5. Evaluation Criteria: (to be added)

C. REACTING

1. Length: 2-3 pages. This section should be written in a clear, concise, logical and grammatically correct fashion uncontaminated by spelling errors.
- 2.1 Content (all except group leader): Depending on the format, the elements of this section may vary. However, most written reactions should probably contain the following elements:
 - a. a clear statement of the point(s) being addressed by the student.

- b. appropriate references to the source materials on the point(s) being discussed.
- c. A well-reasoned analysis, taking into account one's past and present personal experiences.
- d. a clear, concise statement of one's personal point of view and a concrete recommendation where appropriate.

*Some students find it easier to focus their efforts if they use a letter-to-the-editor format in presenting their reaction.

**Note: The reaction need not be entirely in written form. For example, a student may propose that a specific concrete action be taken, e.g., circulating a petition, arranging a meeting, colloquium, debate, demonstration, etc.

3. Validation: Not necessary. At the conclusion of the final session on the topic, the 3 sets of related notes (Reading, Reflecting and Reacting) are ordered, stapled and submitted to the instructor.
4. Additions: As in the previous stage.
5. Criteria: Indicators of reaction quality include the following items. Their incorporation into a pass/fail decision is a matter of instructor judgement and should take into account individual differences as well as the amount of experience the students have had with this procedure.

- statement of point(s) to be discussed
- appropriate references to source materials
- evidence of information seeking beyond the assigned materials
- logical development
- analytical character

- conciseness and clarity of expression
- recognition of multiple viewpoints
- formulation of a personal point of view or clear statement of reasons preventing this
- concrete recommendation(s)

2.2 Content (group leader): The group leader is responsible for preparing a summary of the group's discussions and, if asked, presenting this information orally to the large group (class-as-a-whole) meeting. Both majority and minority views on the important points should be presented.

APPENDIX D - STUDENT RESPONSIBILITIES

A. Leadership responsibilities:

1. Validate log notes. This simply requires signing your name immediately below the bottom line of the last note in each students' log. Reading the notes is not necessary.
2. Keep attendance record.
3. Coordinate/moderate discussions
 - begin session by having each member quickly indicate what he/she wants to discuss (1-2 minutes each).
 - develop a priority listing of these items and start with the most important (e.g. in the Reading Section, it may be necessary to begin with clarification of terms and concepts).
 - promote tolerance of different viewpoints.
 - participate in the discussion as an equal.
4. Prepare summary notes at the end of small group discussions to use as a basis for writing the group summary report.
5. Prepare a group summary report instead of a reaction paper for the large group meeting and be prepared to present or summarize the report orally.
6. On the top front page of the log notes, clearly show:
 - a) Print your Name
 - b) Identify yourself as "Group Leader"
 - c) List the absences (names and dates) from the small group discussions

3. Regular Member's responsibilities:

1. Submit log notes to leader for validation at the beginning of each session.
2. Participate in discussions as a collaborator with the idea that everyone's ideas and opinions are valued. Each participant is responsible for contributing to the discussions in a positive and constructive fashion.
3. Prepare a well-reasoned, personal reaction paper.
4. Submit log notes to the instructor at the close of the large group meeting.
5. On the front page of the log notes, clearly show:
 - a) Name
 - b) Group designation
 - c) Dates absent

C. Large Group Meeting

1. Participate appropriately in scheduled activity. This varies according to format (e.g., debate session, guest speaker, class discussion).
2. Submit log notes to instructor.

APPENDIX E - INSTRUCTOR RESPONSIBILITIES

A. Organization

1. Develop a set of orienting questions (at least 1 per topic) and appropriate source materials for each. (For example, see Appendix A).

*Source materials should be thought-provoking.

**The amount of material allocated to the various topics should take into account the nature of the student's activities in this format. For example, extensive reading lists leave little time for reflection--the most important part of this approach.

***Acceptable sources include many unconventional forms - e.g., magazine and newspaper articles, television documentaries, musical recordings, guest speakers.

2. Identify locations for both the large and small group meetings. Groups should consist of 4-6 members each.
3. Develop a grade assignment scheme (if one is required) which is consistent with 3 Rs philosophy.
4. Adapt the 3 Rs method to the course time schedule.

B. Activities

1. Attend small group meetings as an observer according to a nonsystematic schedule. The instructor should avoid injecting personal views or assuming an authoritarian

role because these actions tend to inhibit rather than promote group discussion. The purpose here is to observe student interactions and to identify strategies for promoting individual student development.

2. Coordinate/moderate large group discussions.
3. Advise students as appropriate. Regular out-of-class "office hours" are necessary for this purpose.
4. Read logs after conclusion of each topic and provide appropriate feedback. Feedback in the form of questions which stimulate the student to think about the topic further or in different ways is preferred to corrective or critical statements. Requiring a student's written response to such questions is appropriate.
5. Keep a record of attendance and progress as reflected in the logs and group discussions.

APPENDIX F - LARGE GROUP ICEBREAKERS

Generating large group discussion can be difficult at times. However, strategies which require minimal initial involvement and are nonthreatening from the student's point of view (i.e., any answer given is acceptable) can be quite effective. Once the initial noninvolvement inertia is overcome, it is surprising how willing students are to participate. If the situation seems hopeless and you are willing to grasp at any straw, try one of the following:

1. Adjectives

Start: Give me the 1 adjective which you think best describes the topic. (Wait for responses from at least 1/2 dozen different students.)

Followup: Why do you feel the topic is (adjective)? Do the rest of you feel the same way? Why?

2. Surprise

Start: What did you find most surprising about this topic or article or scene...)?

Followup: Why were you surprised at that?

Use your imagination to generate more ideas. Just remember to keep things simple and nonthreatening.

APPENDIX G - ALTERNATE FORMATS/RESOURCES

Student oral presentations

Oral presentations can take a variety of forms. Each of the following formats can be considered a form of oral presentation. The simplest form is a student reading a reaction paper. This can be either as a volunteer or by assignment. It can be a task required of regular group members or group leaders. The organization and timing of this procedure depends greatly on the size of the class. If possible, it is useful to leave open an opportunity for questions.

Role play

Role play is a very useful tool to help put the students in other people's shoes. Planned role play often takes the form of a skit or small play that illustrates a situation. More informal role play is possible and can be used effectively to enhance discussion. It is more difficult in the sense that participants do not get a chance to prepare and, therefore, can feel more self-conscious. Volunteer participants are the best choice.

Panel discussion

A panel discussion can take two forms. The first, which is akin to role play, is a reenactment of a panel where students play the role of different participants. For example, if a panel were to model a school board meeting then one participant could represent the board, one the administration, another the teachers and finally one could represent parents. This format is less threatening because the students are playing roles rather than presenting their own opinion.

The second form of panel discussion involves students who are presenting specific viewpoints and information. The discussion format organizes the interaction and a moderator might be helpful in conducting the program. This method is helpful in presenting an issue that has many sides.

Debate

A debate presenting two contrasting sides can be pursued on a formal or informal basis. Most students have little experience with formal debate and they will need specific instruction or an opportunity to research the topic. A more

informal approach can be adapted to meet the needs of the class. Again, some brief instruction on procedures would be helpful.

Speakers and Guest Lecturers

The 3 R's class structure easily accommodates outside speakers and guest lecturers. Their participation can be woven into the fabric of the reading assignments and class discussions. Papers on the topic can be assigned prior to the visit and the reading and reflection sections will help prepare students for the presentation. If possible it is helpful to discuss papers written by the guests. This helps to bring the written word to life.

In a large university or multidisciplinary department it may be possible to organize a course by coordinating the participation of a number of different faculty members. The teacher of the course serves as a coordinator and helps the students to integrate a number of different perspectives. Using this approach it might be possible for a graduate teaching assistant to run the mechanics of the course.

Audio-visual materials

When it is not possible to bring guests in live or to create experiences that resemble reality then audio-visual material can be used very effectively. To date, videotaped segments of television specials, e.g., ABC's "To Save our Schools, To Save Our Children" have been used effectively to introduce classes to some of the problems facing schools.

Recorded material, either video or audio, should be handled in the same way as written reading material. The first goal is to clarify the information and understand the artist's/director's/journalist's/author's point of view. In the second step, the piece is subjected to critical analysis. The variety of material to date has included audio records, slide show presentations, videotaped segments of television and 16 mm film presentations.

Student trips

One resource that spans in-class and out-of-class resources is a student report on an outside activity. Often reading assignments and discussion spark an interest to go and see things firsthand. Students have visited schools and school boards, executive breakfast meetings, policy planning meetings, graduate research colloquia and home schooling

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programs. For other classes, visits to businesses, courts, hospitals, or other universities might lend themselves to increased awareness of issues in the fields of economics, law, medicine or higher education.

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APPENDIX H - SUGGESTIONS FOR ADAPTING THE 3 Rs
TO OTHER TYPES OF COURSES

- H.1 Problem-oriented courses (like Statistics)
- H.2 Foreign language courses

H.1 Problem-Oriented Courses

- A. Identify or create a set of concrete, interesting, real-world problems to be solved by the students. Deadlines for these can be spaced throughout the course and each problem can be constructed to elicit the kinds of thinking which should be developed at various points in the experience.
- B. In the 3 Rs format:
1. Reading - understanding of the problem and its importance
 2. Reflecting - critical analysis of the problems formulation; identification of appropriate and feasible solution strategies; analysis of the gains and losses associated with each
 3. Reacting - selection of a strategy; development of a plan for achieving solution; execution of the plan
- C. Resources include:
- (a) printed matter - texts, journals, technical manuals
 - (b) human - instructor (as consultant), computer staff consultants
 - (c) computer facilities

H.2 Foreign Language Conversation Courses

- A. Considering the mix of students enrolled, identify a set of real-world problems or issues which appear to be highly motivating. For each, formulate 1 or more focus questions and a set of related source materials (e.g., articles, videos, fotos, comic strips) which are relatively short in length to allow an adequate amount of time for reflection.
- B. The 3 Rs format can be used directly as described in the manual or varied according to instructor's judgement.
- C. Resources (all in the language being studied) include:
 - guest speakers
 - films, videos, fotos, comic strips, etc.
 - radio broadcasts, political protest songs, etc.
 - books, articles, etc.