This is the first of three volumes on performance-based teacher education for students in the secondary social studies practicum and student teaching programs at Rhode Island College. These materials were developed in order to provide an individualized, competency-based teacher training program. The modules in this booklet, dealing with general teaching skills, were field tested in two high schools and revised in response to evaluations. In this teacher preparation phase of the program, the module cluster focuses on various teaching skills. Each module presents materials for a different skill. Module topics include: an orientation to the teaching profession; writing objectives; set and closure; facts, concepts, and generalizations; questioning; responding, verbal and non-verbal; small group instruction; lecturing; lesson and unit planning; and simulation. The format of the modules is structured around a rationale, objectives, pre-assessment, activities, and post-assessment. Volume II is SO 006 629; Volume III is SO 006 630. (KSM)
EDUCATION 310

Social Studies Practicum

An Individualized Performance-Based Model

Pilot Program

Spring 1973

Peter E. Piccillo
When one sets out to train a teacher, certain fundamental questions must be addressed. Such questions are basically the same questions considered by any good teacher in preparing a single lesson. What are we going to do? Why? How? and So what? In what ways will we know when and how well we have accomplished what we set out to do?

For several years, I and many of my colleagues in the field of teacher-training, have pondered over how best to inculcate the skills and attitudes which the good teacher should possess. Beyond skills and attitudes, there remained that indefinable something, call it presence, fire, enthusiasm, what you will, that separates the very good or brilliant teacher from the rest. I am inclined to believe that teaching is a mold of science and art. Further, that artists develop themselves through honing, refining, and improvising upon the basic skills in any profession or craft. The conclusion arrived at through this reasoning process is that we can train and develop craftsmen by equipping them with the basic skills of the profession. Brilliance, great creativity, genius, will have to develop from within.

Having thus dealt with the problem of deciding on what was possible, the next step was to identify from among the hundreds of possible teacher skills and attitudes, those which we felt were the most essential, since one semester is obviously not enough time to learn everything.

Rhode Island College's secondary school teacher training program had begun to ask itself some fundamental questions and was beginning to address itself to them. The Practicum Handbook contained a list of instructional objectives which applied to all disciplines, and supplementary lists for each discipline. Attempts
had been made to draft them in behavioral terms. Still, they were general, and in many cases honored only verbally. But movement had begun, and more movement was inevitable, since the machinery had been set in motion that would lead to the asking of more questions and the need for more answers.

As in so many other instances, the impetus for change came from below. The innovations in curriculum which had been inspired by practices developed in the primary grades - mushroomed into a nationwide interest in individualized instruction. In response to a great need for innovation in teaching method and strategies in some of the Rhode Island Schools, training of secondary school teachers in the development and use of individualized curriculum materials was seen as a positive step. Utilizing resources at hand, which included a resident expert on individualized instruction, Dr. Sidney P. Rollins, and importing outside help when necessary, the secondary education department, and in particular, the social studies contingent led by Dr. Carmela Santoro, became proficient in this aspect of teacher training. Yet, it didn't do enough. At semester's end when our most thoughtful students were asked to comment on how well we had succeeded in accomplishing the learning objectives so prominently displayed in their handbooks - they invariably and truthfully reminded us of our inevitable shortcomings. Most serious of all, was the inescapable contradiction of encouraging teachers to be creative, imaginative developers of new curriculum materials, so that their pupils could progress at their own rate - while conducting their training in a traditional lock-step set up. Perhaps it was this unspoken but ever present challenge to "do as we say" that led to further movement.

Setting out to develop an individualized, competency-based teacher training program then, was not a spur-of-the-moment decision, but an idea whose time had come. The Rhode Island Staff Development Center was there at the right time with
encouragement, support, and financial and scholarly resources. I needed little persuasion to undertake the task of attempting to develop a program in the social studies area.

Working from a revised list of instructional objectives from the RIC Practicum handbook, as well as several other sources, and drawing heavily on subjective judgements based on my evaluation of other programs and materials throughout the country as well as my acquaintance with time, space, and resource limitations - I listed those skills which I felt were necessary, at a beginning level, for successful teaching. The next step was to select from that list the skills which I felt would best lend themselves to a fledgling CBTE program.

Having thus decided what was to be done, and satisfied that it was worth doing, I set myself to the task of designing and writing modules which would accomplish the individualized learning of the desired teaching skills and attitudes.

A two-day work-retreat sponsored by the RISDC helped to focus more precisely on what was being accomplished, and how best to organize the implementation of a pilot PBTE practicum for the spring semester of 1973. Professor Milburn Stone agreed to work with me in this undertaking.

Two laboratory school sites were selected, Gilbert Stuart Middle School, and Mount Pleasant High School. The cooperating teachers in both schools were fully informed of our intentions for the program, and agreed to work with us.

Students in all four sections of secondary social studies practicum were assembled, and the PBTE program was explained to them. We asked for volunteers from this group-who would commit themselves to try it out. Thirteen hardy souls responded.

The modules which comprise the heart of the program, and which follow this statement, have been revised in response to what we learned during field testing.
The suggestions of the practicum students, along with those of their cooperating teachers were quite valuable to the revision process.

Professor Stone will continue the process of revision as he and Professor Alan Fisher undertake another PBTE Practicum in the Fall of 1973. Their planning will take into consideration the strengths and shortcomings which became evident during the first attempt.

First priority ought to be, and is, given to a more thorough orientation phase, to offset insecurities generated by being totally on one's own for the first time. We found that for the first week or so, it was helpful to share our feelings so as to dispel our fears, and to work through some of the early module activities as a group, so as to build familiarity with the process of individualized learning and more solidly prepare students to "test their wings" in solo flight.

Some of the logistical foul-ups which had been anticipated, never happened. Students were able to cycle into the laboratory schools when they were ready with a minimum of difficulty. This was the result of excellent cooperation by the teachers at Gilbert Stuart and Mount Pleasant. A close working relationship between the cooperating teachers and Practicum professors was facilitated as a result of the practicum instructors spending a good deal of their time in the field. It is anticipated that cooperating teachers ought to have a larger role in the on-campus theory components of Practicum, and in demonstrating various teaching skills and techniques. This is based on the belief that we have not sufficiently tapped the expertise of the cooperating teachers as resource people. Plans to implement this are now being developed.

In summary, it has been a strenuous, but interesting and worthwhile endeavor for everyone involved. Students were able to cycle in and out of both laboratory
centers to test and practice their acquired skills. Remediation, when necessary, was also arranged quite easily. The students, forced in great part to lean on themselves, developed a close-knit espirit within the entire group, while at the same time becoming more independent and self-reliant.

No one of them has escaped close scrutiny, and their evaluation for Practicum was based on extensive, verifiable data. We feel we know these students better, everyone of them, than in any previous practicum. We also feel they know themselves a little better.

There are some problems which remain unsolved, but they have now been identified, and the experience of one semester will, I trust, suggest ways by which they can be alleviated. Some of these problems, which need to be addressed, are as follows:

1. Evaluation procedures for specific skills within the context of the teaching act need to be refined. Professors Stone and Fisher have included this consideration in their planning for the Fall 1973.

2. The amount of work required of the student in a PBTE practicum is greater than that in the traditional model. Revision of modules (appended) and improved administrative techniques should improve this situation. The returns, however, were proportionately greater as well. We feel the students benefitted from the rigorous demands of the practicum, but sometimes at the expense of their other courses.

3. The demands made on the time of the Practicum instructors were also great. We feel that a deep commitment on the part of staff is a prerequisite to PBTE. Improved orientation and administration should at least partially alleviate this situation. Again, this consideration has been included in planning for next time.
4. Where do we go from here? The prospects seem bright. As noted, Professor Stone and Fisher will offer a PBTE practicum in the Fall of 1973. In addition, a PBTE student teaching experience will be operational in the Fall of 1973.

Peter Piccillo
Rhode Island College
Spring, 1973
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A Note To The Public

The materials in this booklet have been developed under the auspices of the Rhode Island Staff Development Cooperative, a consortium funded by the New England Program in Teacher Education. This is the first of three volumes on performance-based teacher education for students in the secondary social studies practicum and student teaching programs at Rhode Island College. The modules in this booklet deal with general teaching skills. These modules were field tested and revised in response to field-test evaluations. It is anticipated that the modules will undergo further and continuous revision as they are implemented.

A second booklet containing modules dealing with social studies skills plus general teaching skills will be available in the fall of 1973. New modules in this volume will be field tested and evaluated during the fall semester of the 1973-74 academic year.

In process is a third volume containing modules for student teaching. They will be field tested and evaluated during 1973-74. A copy of this collection will be available in draft form in September, 1973.

Dr. Carmela E. Santoro, Director
Rhode Island Staff Development Cooperative
Persons or agencies wishing further information relating to the materials contained herein should contact:

Dr. Carmela E. Santoro  
Rhode Island College  
600 Mount Pleasant Avenue  
Providence, R. I. 02908
A Note to the Student

You are about to embark on an individualized, competency-based teacher training program. The program is structured around a set of modules. Each module is designed to aid you in acquiring a skill or concept which will be of value to you in becoming an effective teacher. The modules in this booklet in no way constitute a complete collection of useful and necessary teacher skills. It is expected that new modules will be added as they are developed, and that the present modules will be revised continuously, so as to make them more effective.

Essentially, what you will be asked to do is to work your way through the suggested learning activities until you feel you can demonstrate your achievement of the objectives in each module. In some cases you may not need to perform all the suggested activities to achieve competence, while in other instances you may wish to seek advice from your Practicum instructor for remedial work beyond the activities in the modules. In some modules all the activities are required.

You may already possess some of the skills treated in the modules. If so, all you need do is demonstrate your competency and you will be credited with having achieved that part of the program. There is no need for you to have to wade through, in lock-step fashion, instruction and study in a skill you already have.

There is no particular order in which the modules need be completed, although logic would indicate that some of them, e.g., "Personal Orientation to the Teaching Profession" perhaps ought to come at the beginning of your program. There are no uniform schedules or calendars or deadlines to meet in completing your program. You will progress at your own pace. Each student, in concert with
the Practicum instructor, will be expected to guide his own progress through the program. Your instructor may from time to time make suggestions if he feels you are not making satisfactory progress, but in the main, you will be able to make your own schedule.

This flexibility allows the ambitious student the possibility of completing Practicum before the normal end of the semester. Once the program requirements have been met, the student is finished. At that point he may wish to simply concentrate on his other courses for the rest of the semester. It may be possible to cycle some students directly into student teaching.

For those who have difficulty in achieving the program objectives, there is built into the program ample opportunity for observation, evaluation, and counseling by and with the Practicum instructors and/or cooperating teachers in the laboratory schools. Each student can arrange for individual practice, recycling, and remediation, until he is able to achieve the program objectives.

The program is thus concerned with bringing each individual student along at his own rate, and not with artificial competition or arbitrary deadlines. Opportunities for group activities are built in to several of the modules, however, and we find that the students who elect the individualized Practicum develop a close rapport and cooperative spirit.

The progress of each student through the course requirements is posted, and very often it is possible and desirable to consult with one of your colleagues who has successfully completed a module, as to how best to proceed. As in many other instances, students learn a great deal from each other. We encourage this. The result is that although the student is on his own, going in his own direction at his own rate, he also has access to a good deal of peer support, an important factor in such a pre-professional program.
Because of the individualized nature of the program, the Practicum instructor is able to spend a greater amount of time with each student and is thus able to advise, prescribe for and guide the progress of his students with a proportionately greater degree of knowledge and insight. The students have access to their instructors when they need to see them. If a group of students would like to have a lecture, discussion, demonstration, or would like to arrange observations, they need only to schedule a convenient time with the secretary. The program is designed so that all of the resources of the Practicum, including the Practicum instructors, are on call for the students when they are needed. It is a student centered program. There is no need for anyone to be lost or hidden in such a program. Please arrange to see your instructor early in the semester, and often throughout your progress through the program. He is there to help you.
Rationale: The activities included in this experience are designed to have you reflect on your personal reactions to the teaching profession. As the quality and extent of our activities and work are often related to our feelings, we have designed these activities for the first experience in Practicum. In completing these activities, you will be able to:

Behavioral Objectives:

1. Identify and list your personal affective reactions to teaching at this point in your career.

2. Evaluate the ease and/or difficulty you may experience in dealing with your own affective reactions and attitudes.

3. Discover the affective responses other students at a similar level of training are experiencing.

4. Describe the critical educational problems and situations you will confront and have to deal with in a career in teaching.

5. Describe the degree of personal energy, commitment and skill needed by teachers at various levels in the education profession.

6. Explain in a clear and precise way why you wish to pursue a career in the teaching profession.

Pre-Assessment: None.

Activities:

1. What you think/know now. You will be required to keep a diary or journal of your Practicum experiences and feelings. In a notebook exclusively for this purpose, write your responses to the questions embedded in the objectives (above).

   There are no "correct" or "incorrect" responses, but the best ones will be honest, and based on serious introspective self-analysis.

2. Observation of Schools. You will be assigned two days on which to visit two of the lab schools we will be working in during Practicum.
Activities (continued):

Plan to spend at least two hours in each school, being sure to visit as many significant areas and classes as is needed to give you an understanding of the operations of the total school. Before you make your visit, prepare a checklist of things you will want to observe, and questions you wish to ask. The following list of suggestions could be helpful in designing the plan for your own visits:

a. Physical plant: heat, availability of space, furniture
b. Materials and supplies: instructional equipment, books, library facilities
c. Absenteeism
d. Appearance and behavior of students and teachers
e. Classroom procedures and student interest.

After completing each visit, imagine yourself a member of the faculty in the school. Where would you best "fit"? Would your being there be fulfilling to yourself and enriching to the students? Why? Enter your responses in your journal.

3. Interviews. Choose some people already involved in education and arrange interviews with them. The purpose of the interview is for you to discover the feelings and attitudes of those who have made a career in education. Try to interview people in all facets of education: administration, department chairmen, and teachers at the various levels of education: college, high school, etc. Record the results of your interviews in your journals.

Construct your own questions, keeping in mind the purpose of the interview. Below are just a few suggestions to help you in preparing your interviews.

a...number of years in education, reasons for entering field of education

b...what are the greatest rewards, the most difficult moments, the frustrations of a career in teaching

c...what is the biggest "threat" or most serious problem facing education today

d...if you lost your job today, would you try to get a similar job tomorrow

4. Discussion. Arrange a group meeting with other members of the Practicum to discuss the points listed below. You may wish to have this discussion at one of the schools visited, with the cooperating teacher(s) as participant/moderators.
Activities (continued):

Alternately, you may elect to hold your meeting on campus. If you wish, a member of the Counseling Department can meet with you as a facilitator to communication.

Your Practicum instructor can arrange this for you.

The discussions should focus on the following considerations: each of you are probably experiencing certain affective (emotional) reactions to your beginning the practical, on the job training necessary to becoming a teacher. Each of you have completed observations of schools, and interviews with teachers and administrators. To the best of your ability, try now to explain how you feel about teaching to each other. Are you challenged, or discouraged; do you feel inadequate or are you confident you can learn the skills you will need to be an effective teacher?

Try to listen carefully to each other.

Post-Assessment:

After your discussion take some time, by yourself, to think about the reactions of your fellow students and your own reactions. Then write, specifically and concisely, your attitude and reaction to teaching at this point. Can you anticipate any difficulty you might have (because of your personality or training) in the Practicum experience. Can you cope with and grow from your own feelings about teaching?

After you have completed this, write a brief and concise statement explaining why you want to be a teacher.

ALL OF YOUR NOTES AND REFLECTIONS ON THESE EXPERIENCES SHOULD BE INCLUDED IN YOUR JOURNAL.
REFERENCE SYSTEM DESIGNATION: 400.03.4

PROGRAM: MOUNT PLEASANT HIGH SCHOOL/PRACTICUM

COMPONENT: TEACHER PREPARATION PHASE

MODULE CLUSTER: TEACHER SKILLS

MODULE: WRITING OBJECTIVES

DEVELOPER: KATHERINE MURRAY, PETER PICCILLO

DATE: MAY 1973

FIELD TESTED BY: K. MURRAY & P. PICCILLO, SPRING 1972

FIELD TESTED BY: PETER PICCILLO & MILBURN STONE DATE: SPRING 1973

REVISED BY: PETER PICCILLO, JUNE 1973
MODULE - WRITING OBJECTIVES

Rationale:

There are several reasons for writing learning or instructional objectives. Probably the most obvious is to come to a conscious realization that what the teacher does in a classroom (teaching-learning situation), has some legitimate purpose. In writing learning objectives, the teacher ought to respond to the following questions:

1. What am I going to do?
2. Is what I plan to do worth doing?
3. How will I go about doing what I plan to do?
4. How will I know when and how well I have accomplished what I set out to do?

There are two basic types of instructional objectives. Those that are easily measurable in terms of definite and demonstrable changes in behavior are called, surprisingly, behavioral objectives. They are usually concerned with the cognitive or psycho-motor aspects of learning. That is - once a student has learned something, and applies his knowledge, his behavior will measurably change. An example would be toilet training.

Success in achieving objectives which concern themselves with attitudinal or emotional responses or changes (affective processes) on the part of the student is more difficult to measure. This does not mean that such objectives should not be pursued. There is however, great difficulty in measuring with any degree of accuracy or precision an appreciation of the Roman contribution to contemporary society or an appreciation of the value of classical music. Usually, your day to day or short-range activities will be designed to achieve small increments in knowledge and understanding. These may lend themselves more readily to behavioral terminology than your long range or term objectives. In any case, no one professing to have competence in the field of education today can exist in the field without an understanding of the behavioral form of learning objectives.

Objectives:

When you have completed the activities associated with this experience, you will be able to:

1. Distinguish between cognitive and affective objectives.
Objectives (continued):

2. Select those aspects of the learning process which are best measured in behavioral terms.

3. Write learning objectives, both long and short range, in behavioral terms.

4. Place in behavioral terms, learning objectives written in a different form.

Pre-Assessment:

1. Select a topic area with which you are familiar and narrow that topic sufficiently so that it can be taught in a 15 minute mini-lesson, then write a list of at least six instructional objectives in behavioral terms.

2. Given a list of learning objectives, rewrite them in behavioral form. (List and suggested directions included in this module.)

Activities:


4. Select one of the lessons supplied by the Practicum professors and write behavioral objectives (cognitive and/or affective) for that lesson.

5. Work through the Viñcet program Selecting Appropriate Educational Objectives, by W. James Popham. A modified version of a portion of this program is appended. You may not need to go beyond it. If, however, it is necessary for you to do more to reach a useful understanding of the selection and development of learning objectives, filmstrips and audio tapes are available as part of this program.

Post-Assessment:

When you have progressed to the point that you feel confident that you can perform the tasks at the level of competency required, complete the following:

1. Complete the second Pre-Assessment suggested above (sheet provided with this experience).
Post-Assessment (continued):

2. Design your own learning activity (15 min.) using resources and/or materials of your own choosing. You may decide to utilize the resources of the Curriculum Resources Center, resource people, other readings, films, tapes, interviews, periodical literature, scholarly journals, etc. You may wish to correlate this activity with the module on planning 400.05.3.

3. Examine the following instructional objectives. Identify the domain or the process to which the objective is directed (cognitive, psycho-motor, affective). Rewrite those objectives not correctly or effectively stated in behavioral terms.

a. The pupil will become familiar with the background of World War II.

b. The student will gain a working knowledge of the RCA Tape Recorder.

c. The student will really want to become a good teacher.

d. The student will know the names of the five most recent presidents of the United States.

e. The concept of world unity will be treated.

f. The student will know the novels of Faulkner.

g. At the end of the course, the student will have developed qualities of good citizenship.

h. The student will appreciate the importance of free speech in a democratic society.
EVALUATION

Comments from Center personnel indicate students demonstrated exceptional skill in writing objectives during their first experience in the field.

In video taping sessions, students without access to lesson plan were asked to identify objectives in their observation of lesson. We found that most often, objectives were easily identified through this observation -- which demonstrates to us that students could both write, implement and recognize the importance of objectives.

Module extremely successful. (Spring 1972)

Evaluation data from second field test indicates that it was indeed a successful module. The present revision (June 1973) is made in an attempt to strengthen it by including heretofore unavailable materials which are quite effective.
SELF-TEST ON BEHAVIORAL OBJECTIVES
(Reprinted from Robert F. Mager,
Preparing Instructional Objectives)

Directions: The following self-test will permit you to check to see how expert you are in determining whether given objectives exhibit the characteristics discussed in Mager's book, Preparing Instructional Objectives. Answer all the questions and then look at the correct answers on the last page.

For the author to have reached his objectives (states on page 1 of his book) you can make only seven errors at most out of the forty-four items.

1. Are the objectives below stated in at least performance (behavioral) terms? Does each at least name an act the learner would be performing when demonstrating that he has achieved the objective?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>YES</strong></td>
<td><strong>NO</strong></td>
</tr>
<tr>
<td>a</td>
<td>To understand the principles of salesmanship.</td>
</tr>
<tr>
<td>b</td>
<td>To be able to write three examples of the logical fallacy of the undistributed middle.</td>
</tr>
<tr>
<td>c</td>
<td>To be able to understand the meaning of Ohm's Law.</td>
</tr>
<tr>
<td>d</td>
<td>To be able to name the bones of the body.</td>
</tr>
<tr>
<td>e</td>
<td>To be able to list the principles of secondary School Administration.</td>
</tr>
<tr>
<td>f</td>
<td>To know the plays of Shakespeare.</td>
</tr>
<tr>
<td>g</td>
<td>To REALLY understand the law of magnetism.</td>
</tr>
<tr>
<td>h</td>
<td>To be able to identify instructional objectives that indicate what the learner will be doing when demonstrating achievement of the objective.</td>
</tr>
</tbody>
</table>

2. Given below are two characteristics of a statement of instructional objectives.

A. Identifies the behavior to be demonstrated by the student.
B. Indicates a standard or criterion of acceptable performance.

Are each of these characteristics present in each of the objectives below? For each objective below, check whether each of these characteristics is present.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td><strong>B</strong></td>
</tr>
<tr>
<td>a</td>
<td>The student must be able to understand the theory of evolution. Evidence of understanding will be obtained from a written essay on evolution.</td>
</tr>
</tbody>
</table>
The student is to be able to complete a 100-item multiple-choice examination on the subject of marine biology. The lower limit of acceptable performance will be 85 items answered correctly within an examination period of 90 minutes.

The student must be able to correctly name each item depicted by each of a series of 20 blueprints.

To demonstrate his ability to read an assembly blueprint, the student must be able to make the item depicted by the blueprint given him at the time of examination. Student will be allowed the use of all tools in the shop.

During the final examination, and without reference, the student must be able to write a description of the steps involved in making a blueprint.

The student is to be able to draw his service revolver and fire five rounds (shots) from the hip within a period of three seconds. At 25 yards all rounds must hit the standard silhouette target; at 50 yards he must hit with at least two of his five rounds.

The student must know well the five cardinal rules of homicide investigation.

The student must be able to fill out a standard accident report.

The student must be able to write a coherent essay on the subject "How to Write Objectives for a Course in Law Appreciation." Student may use all references noted during the course, as well as class notes. Student must write his essay on paper provided by the examiner.

Beside each of the following psychological principles, the student must be able to write the name of the authors of experiments on which the principle is based (list of principles appended).

Given a list of objectives, the learner should be able to evaluate each.

To list the important characteristics of branching and linear self-instructional programs.

The student is to be able to name and give an example of each of six programming techniques useful for eliciting a correct response. To be considered correct, items listed by the student must appear on the handout entitled "Programming Techniques" issued by the instructor during the course.

To develop logical approaches in the solution of personnel problems.
3. Here is a rather poorly stated objective:

The student must be able to understand the laws pertaining to contracts.

Indicate whether the following test situations would have to be considered appropriate for testing whether the objective has been achieved.

<table>
<thead>
<tr>
<th></th>
<th>Not Appropriate</th>
<th>Appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>The learner is asked to write the names of each of the justices of the Supreme Court.</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>Given a contract with certain legal terms circled, the student is asked to write a definition of each of the circled terms.</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>Given a legal contract and a list of contract laws, the learner is asked to indicate which of the laws are violated by the wording of the contract.</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>The student is asked to answer 50 multiple-choice questions on the subject of legal contracts.</td>
<td></td>
</tr>
</tbody>
</table>

4. Which of the test situations below would be appropriate for eliciting the kind of behavior by which you could tell if the student had reached the objective?

Objective: Given a properly functioning audiometer of any model, the student must be able to make the adjustments and control settings necessary prior to the conduct of a standard hearing test.

<table>
<thead>
<tr>
<th></th>
<th>Not Appropriate</th>
<th>Appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>List the steps, in their proper order, for setting up an audiometer for use.</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>Proceed to the audiometer on Table No. 5 and set it up so that it can be used to administer a standard hearing test.</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>Describe the steps followed in the conduct of a standard hearing test.</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>Discuss the role of the audiometer in the hearing clinic.</td>
<td></td>
</tr>
</tbody>
</table>
Answers to Self-Test

1. a. No
   b. Yes
   c. No
   d. Yes
   e. Yes
   f. No
   g. No
   h. Yes

2. a. Yes No
   b. Yes Yes
   c. Yes Yes
   d. Yes No
   e. Yes No
   f. Yes Yes
   g. No No
   h. Yes No
   i. Yes No
   j. Yes No
   k. No No
   l. Yes No
   m. Yes Yes
   n. No No

3. a. Not appropriate
   b. Appropriate
   c. Appropriate
   d. Appropriate

4. a. Not appropriate
   b. Appropriate
   c. Not appropriate
   d. Not appropriate

How well did you do?

Seven errors or less................................. the end.
More than seven errors.................go back to page 10 of Mager's book.
SELECTING APPROPRIATE EDUCATIONAL OBJECTIVES

W. James Popham

Southwest Regional Laboratory for Educational Research and Development
11300 La Cienega Boulevard
Inglewood, California

June, 1967
Selecting Appropriate Educational Objectives

W. James Popham

One of the consoling facts about conventional classroom instructional procedures is that they are usually so ineffective we don't have to worry too much about what is being taught.

However, the moment one develops an efficient instructional sequence—a sequence capable of altering learner behavior, then one has a responsibility to effect the "right" behavior changes. As an individual concerned with the development of effective instructional products, you should be anxious to select instructional objectives which are worthwhile. Unfortunately, many people who are acquainted with the procedure of stating instructional objectives in operational fashion, that is, in terms of post-instruction learner behaviors, tend to set their sights too low. They tend, in other words, to select behavioral objectives which are too often rather trivial in nature. The next program is designed to partially counteract such a tendency.

The program was actually written for classroom teachers, but it should be easy for you to see the implications for product developers. Every point made regarding the classroom instructor's selection of teaching goals can be made with equal relevance for the product developer's choice of his goals.

As you go through the program you will be asked to inspect certain frames, and then to respond on the answer sheet which has been provided. Use a 5 x 7 card as a mask so that you do not inadvertently see the right answer which is presented below the three asterisks. Sometimes you will see three asterisks in the middle of the page as this:

*   *   *

When you do, use your card to cover the area below the asterisks until you have responded on the answer sheet, then check for the correct answer below the asterisks and proceed with the program. Now begin the formal part of the program.

Which of these two semester objectives more clearly communicates an educational intent?

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At the end of the semester:
A. All pupils will be able to list in writing at least 15 states not involved in the U.S. Civil War.
B. Pupils will improve their peer relationships.

That is, which objective is unambiguously stated in terms of observable student behavior? Circle the letter of that objective on your answer sheet by Number 1.

You should have circled A, for objective A leaves little doubt about what is expected of the learner. The second objective, however, permits a number of interpretations regarding how pupils will demonstrate improved peer relationships and, therefore, is much less clear.

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Instructional specialists generally agree that the proper way to describe educational objectives is in terms of student behavior. For when instructional goals are stated in such a way that the instructional target is an observable pupil behavior, or an observable produce of pupil behavior, we have an explicit criterion for determining the quality of our instructional efforts. Such precise objectives are, unfortunately, far less common in our classrooms than they should be. For while broad general objectives may be helpful to teachers in initially deciding on what they wish to teach, these vague objectives are of little assistance in guiding the teacher's selection of actual classroom learning activities—or in deciding how to evaluate the worth of the learning activities they have selected.

Only behaviorally stated educational objectives allow the rigorous selection of learning activities and evaluation procedures. Yet, are behavioral objectives enough?

Let's re-examine the first two objectives for a moment.

At the end of the semester:
A. All pupils will be able to list in writing at least 15 states not involved in the U.S. Civil War.
B. Pupils will improve their peer relationships.

Which of these two goals would most teachers think is more important for children to achieve? Circle the letter of that objective by Number 2 on your answer sheet.

Although there might be some dissenters, the majority of teachers would probably agree that it is most significant for the youngsters to develop good peer relationships than to learn to list 15 states involved in the Civil War.

Here is another example.
A. Students will correctly add 10 sets of three two-digit numbers.
B. Students will become intellectually intrigued by mathematics.

Which, if either, of these objectives is behaviorally stated? Answer by Number 3.

Objective A is stated behaviorally. Now mark the letter of the more important objective by Number 4.

Most teachers would probably think objective B was more important by far than objective A.

These illustrations should make it clear that merely because objectives are stated behaviorally in no way assures that these objectives are valuable, and points up one of the problems with behaviorally-stated instructional goals. The types of pupil behaviors must easily described are often the most unimportant.

TRIVIAL PUPIL BEHAVIORS ARE MOST EASILY BEHAVIORIZED. ("To count to 10," "Spell your name", "Don't spit on Teacher," "To live through the day").

Truly significant educational objectives are usually far more elusive and much more difficult to state behaviorally. For instance, it is obviously more simple to have a student orally recite the names of ten U.S. Senators than it is to describe pupil behaviors which truly reflect insight regarding the role of the
U.S. Senate in determining foreign policy. Many educators who are for the first time advised to state their instructional goals behaviorally, erroneously think that behavioral objectives always deal with trivial forms of pupil behavior.

Consider these two objectives.

A. The student will comprehend the meaning of turpentine as a solvent to be used with dirty paint brushes.

B. The student will be able to shape two clay figures, one of which reflects imbalance.

Which is stated behaviorally? Answer by Number 5.

Objective B is stated behaviorally. Now by Number 6 on your answer sheet circle the letter of the more important objective.

Once more you should have circled B, for most art teachers would consider this outcome more important than any form of behavior suggested by Objective A.

Here is another illustration.

A. The learner will reflect understanding of Shakespeare.

B. The learner will perceive the meaning of Shakespeare.

Which, if either, of these objectives is stated behaviorally? Answer by Number 7.

You should have circled neither, for both objectives employ vague expressions which could be behaviorized in many different ways. Now can you decide which of the two objectives is the more important? Answer by Number 8.

You should really be perplexed if you are actually trying to decide on the more important objective. Neither A nor B should be selected as the right answer for Number 8, because no one can really tell what either objectives means. To judge which is the better objective is impossible.

But suppose both objectives were operationalized as follows:

A. The learner will understand Shakespeare by matching 10 famous quotations with the correct play.

B. The learner will show he perceives the meaning of Shakespeare by writing an essay on the purpose of a given sub-plot.

Now which objective is the more important? Circle the correct letter on your answer sheet by Number 9.

In this instance Objective B is the better choice. When objectives are behavioral, we can then decide which objectives are worth teaching.

Many teachers proclaim their instructional goals in glowing terms such as these:

My students will:
A. Appreciate my subject.
B. Master its content.
C. Become better human beings.
Yet, at the end of the semester, the criterion used to judge the students (and by implication--the teacher) is a trifling true-false test. Behaviorally stated instructional goals force teachers to be more aware of the defensibility of their educational objectives.

As we said earlier, it is not sufficient merely to state objectives operationally. Other criteria must be applied to judge which objectives are most worthwhile. There are several such standards which can be employed. All of them, however, require that objectives be stated behaviorally in order for the objectives to be accurately interpreted.

One inescapable criterion of great influence is the teacher's value preference regarding both the content of a discipline and the behaviors of learners. This criterion is usually employed unsystematically, but it is obvious that it exerts considerable control in the teachers' selection of goals. In a subject field such as history, for instance, instructors will have somewhat different preferences regarding which generalization to emphasize and which historical facts to use in elaborating on them. Even in somewhat more exact fields such as algebra, an examination of different textbooks will reveal some contrasts regarding content. It is fortunate that in spite of many differences among teachers regarding what constitutes the important elements of a subject, there are undoubtedly many more agreements regarding the general value of the topics within a field.

Educators also vary in their estimation of the worth of certain learner behaviors which are less directly tied to a subject, such as the previously mentioned peer relationships or good study habits. For instance, most kindergarten teachers undoubtedly have strong preferences regarding the merit of these two pupil behaviors.

Kindergarten child:
A. Can tie shoelaces.
B. Uses proper toilet control.

Values regarding which pupil actions are more important can also be used to choose appropriate instructional goals. Obviously, the more clearly such values are held, the more useful they will be in judging competing educational objectives.

A second criterion which can be used in judging the worth of educational objectives is a taxonomic analysis of the behavior called for the objective.

A taxonomy is a classification scheme. For instance, many of the sciences use taxonomists or classifications of different sorts of phenomena. Several years ago a group of measurement specialists began to develop a hierarchical taxonomy of educational objectives which they thought would be of value to a variety of educational personnel. One use of such a taxonomy is in judging the worth of instructional objectives. A brief examination of the taxonomy of education objectives is therefore in order.

The first major division of educational objectives in the taxonomy is into three behavior categories or domains. The first of these is called the cognitive domain and covers all objectives concerned with intellectual processes of the learner. For instance, test situations where the learner displays knowledge of certain topics or the ability to perform various kinds of conceptual operations would be classified in the cognitive domain. The vast majority of educational objectives currently employed in the schools would be classified in the cognitive domain.

The second descriptive category is the Affective domain. This covers the attitudinal, emotional, valuing behaviors of learners reflected by interests,
appreciations, etc. It is certainly a more nebulous area than the cognitive domain: but according to many educators—equally, if not more important. For instance, in very loose terms, we are usually more anxious for a student to "like" English literature than to master a particular poem, but to learn to hate literature in the process.

The third domain is the psychomotor. As the name implies, this domain includes objectives concerned with skills such as typing, playing the violin, pole vaulting, etc. There are frequently a few psychomotor objectives in all fields, but in some subjects such as vocational training, physical education, and the performing arts, psychomotor objectives predominate.

Here is a somewhat simple classification exercise.

Student:

(a) Answers true-false test.
(b) Writes his name correctly.
(c) Recites Gettysburg Address from memory.
(d) Wants to be a doctor.

Mark in the spaces provided by Number 10 on your answer sheet a "C", "A" or "P" to indicate whether these objectives are primarily Cognitive, Affective, or Psychomotor.

* * *

These are the correct answers:

(a) Answer true-false test.
(b) Writes his name correctly.
(c) Recites Gettysburg Address from memory.
(d) Wants to be a doctor.

The first objective, answering a true-false test, is primarily an intellectual behavior, hence cognitive. The second objective, a common kindergarten goal, is a difficult motor skill for young children even though they know what letters they are trying to produce, and is a psychomotor in nature. The third objective is a memory task and therefore cognitive. The final objective reflects a value preference on the part of the learner and, accordingly, falls within the affective domain.

Now classify this objective as primarily Cognitive, Affective, or Psychomotor by circling the correct letter alongside Number 11.

The pupil will reflect his interest in the topic treated during the unit by subsequently selecting books pertinent to it during free reading periods.

* * *

You should have circled A, for this is an example for an affective objective which describes a learner's interest in a topic. In this instance the teacher has devised a scheme to check interest which is undoubtedly more valid than for example, at the end of the unit, asking the pupils who are interested in the topic to raise their hands.

Which domain is represented by this objective?

Pupils will learn to translate correctly in English previously unseen short stories written in Russian.
This, too, is a cognitive objective.

Now try this objective and classify it by Number 14 on your answer sheet.

The student will learn to ski down the practice slope, falling no more than once, and breaking no more than one bone.

This, of course, illustrates a psychomotor objective.

One of the advantages in classifying behavioral objectives according to this three-part scheme is that teachers often discover that too many of their objectives fall within only one domain. There is nothing wrong with having all objectives represent a single domain—as long as this is a rational choice on the part of the teacher. Many teachers, however, discover to their surprise that they are teaching only cognitive objectives and are completely neglecting affective or psychomotor outcomes. So the first advantage of a taxonomic analysis of objectives is that it can point up such unconscious overemphasis.

A second element of the taxonomy of educational objectives is that within each domain there are levels representing increasingly higher or more complex forms of behavior. Each of the three domains can be divided, but the subdivisions of the cognitive domain are particularly useful in evaluating educational objectives and can help in selecting objectives which demand complex responses from learners.

- Evaluation
- Synthesis
- Analysis
- Application
- Comprehension
- Knowledge

Time does not permit an elaborate examination of all these six levels, but briefly, these are the types of objectives covered by each:

The lowest level, knowledge, essentially involves recall of specifics, universals, methods, etc. For purposes of measurement, the recall situation requires very little more than bring to mind an appropriate response. The other five levels necessitate some form of intellectual ability or skill, but the lowest level of knowledge requires only rote behavior.

Comprehension, the second level, refers to a type of understanding revealed by the learner's being able to make use of the material or an idea without necessarily seeing its fullest implication. Instances of comprehension will be seen
in a student's ability to translate languages, interpret graphs, or extrapolate from a series of numbers.

Application involves the use of abstractions in particular and concrete situations, such as the application of the principles discussed in a scientific report to similar phenomena in other situations.

Analysis requires the breaking down of a communication into its subcomponents so that the relationship among these elements is made clear as, for instance, when a student can distinguish facts from opinions in a newspaper article.

Synthesis entails the putting together of elements to form a new, original entity. Such a ability is the planning of a unit of instruction for a particular teaching situation.

Evaluation describes behaviors in which judgements are made about the values of material or methods used for given purposes. Criteria applies in making these judgements may be those determined by the student or those which are given to him by someone else. For example, judging the quality of written essays according to previously established criteria is an instance of evaluation behavior.

While there are several advantages in being able to classify education goals into each of these six categories, the primary fact usually revealed by applying the several cognitive levels is that almost all of the teacher's cognitive goals are only at the lowest level. It is convenient, therefore, to reduce the six levels to what is essentially a dichotomy, the lowest level, and those higher than the lowest.

Higher than the lowest:
6. Evaluation
5. Synthesis
4. Analysis
3. Application
2. Comprehension

Lowest:
1. Knowledge

Even this rough, two category scheme is helpful in judging the appropriateness of educational objectives, for it enables us to locate the proportion of our goals which are at the lowest cognitive level.

Consider this objective:

The learner will be able to match correctly the dates of famous events in the history of American Education with the events.

Does it represent the lowest or a higher than lowest level of the cognitive domain? Answer by circling the L or H alongside Number 15 on your answer sheet.

This is a knowledge item, the lowest level of the cognitive domain.

Now try this cognitive objective:

The pupils will be able to arrange in proper order three newspaper articles dealing with the same topic according to well defined criteria of (1) accuracy, and (2) clarity.

Is it a lowest or higher level goal? Answer by Number 16.

You should have circled H, for this is an instance of a higher level behavior than mere recall.

Here is another objective:
The student will be able to correctly associate pictures of ten oil paintings (which he has never seen before) with one of four famous impressionist artists.

Decide whether it is a lowest or higher level cognitive behavior. Answer by Number 17.

* * * 

This represents a higher than lowest level, for the student must apply previously learned criteria in differentiating among the four artists' efforts. What about this objective?

Learners can list in writing at least four works of Milton, Keats, and Pope.

Answer next to Number 18.

* * * 

This is a recall item and falls in the lowest level of cognitive behavior. There is nothing intrinsically wrong with knowledge items--after all—who could be opposed to knowledge? However, if this is all the teacher is accomplishing perhaps his sights should be set somewhat higher.

Many times a careful analysis of more complicated goals will reveal a number of lowest level cognitive behaviors which must first be mastered by the pupil enroute to the attainment of a later, higher level of behavior. This, of course is quite acceptable.

Now putting together what you have learned about the three domains and the levels of the cognitive domain; decide whether the following objectives are primarily cognitive, affective or psychomotor, and, if cognitive, whether they represent the lowest level of that domain. For this objective, answer by Number 19 on your sheet.

The pupil will be able to sketch with charcoal a reasonable accurate representation of a windmill.

* * * 

This is an illustration of a psychomotor objective.

How about this objective?

The teacher wants her pupils to show improved vocabularies by selecting from multiple choice alternatives the correct definitions for 20 words previously defined in class.

Select your answer by Number 20.

* * * 

This is a cognitive objective at the lowest level.

Now classify this objective and answer by Number 21.

Students will fill out and return anonymously questionnaires designed to measure their attitudes toward minority groups.

* * * 

This is an attempt to measure student attitude and is therefore an effective objective. Even though self-report devices have certain measurement limitations, they are probably better than using nothing to assess affective outcomes.

Here is a final objective for classification.
When presented with previously unencountered problems in geometry, the student will display a creative solution by using already learned theorems in any manner which, for him, is unique but at the same time adequate to solve the problem.

Answer by Number 22.

* * *

This is an instance of a higher than lowest level cognitive objective.

In summary, you have seen that in order to judge the value of instructional objectives they must be stated in terms of student behavior. Two criteria were then described which can be used to evaluate the quality of such objectives.

The numerous examples of instructional goals presented during the program should illustrate that a behavioral objective certainly need not be trivial. In fact, operationalizing our instructional goals permits us to detect and eliminate those which are unimportant.

THE END
### SELECTING APPROPRIATE EDUCATIONAL OBJECTIVES

**ANSWER SHEET**

Please circle the number of any item you did not answer correctly for purposes of program revision.

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REFERENCE SYSTEM DESIGNATION: 400.02.3

PROGRAM: MOUNT PLEASANT HIGH SCHOOL/PRACTICUM

COMPONENT: TEACHER PREPARATION PHASE

MODULE CLUSTER: TEACHER SKILLS

MODULE: SET AND CLOSURE

DEVELOPER: KATHERINE MURRAY, PETER PICCILLO

DATE: MAY 1973

FIELD TESTED BY: K. MURRAY & P. PICCILLO DATE: SPRING 1972

FIELD TESTED BY: PETER PICCILLO & MILBURN STONE DATE: SPRING 1973

REVISED: JUNE 1973 BY PETER PICCILLO
Rationale:
These are two terms that will have a significant place and meaning in your new teacher-vocabulary. Learning how to "establish set" and "effect closure" are essential in this initial phase of teacher training.

Establishing set means bringing about the proper psychological and social readiness in the student so that involvement and student response will be created. Set informs the student of the goals or objectives of the learning activity, suggests possibilities for exploration and most importantly, relates the subject matter being examined with significant concerns of the student. In short, it gives the student a glimpse of what is "up" for that learning activity and if it is effective set, it creates the desire to participate; it creates the need to know.

Closure is the complement of set. In closure the main points of the lesson are re-stated or emphasized and the next step is suggested. Closure suggests a future as well as giving the student a sense of accomplishment. Good closure is in reality long range set. In effecting closure, a competent teacher makes sense of what happened and gives the student something to look forward to.

Behavioral Objectives: When you have completed the exercises suggested in this experience, you will be able to:

1. Identify and describe the necessary elements in effective set and closure.
2. Compare and evaluate the effectiveness of different techniques for establishing set and effecting closure.
3. Plan and execute a suitable set and closure for a mini lesson.

Pre-Assessment: None

Activities:
1. Read the General Learning Corporation booklet (green cover), Teaching Skills: Creating Student Involvement.
2. View three films: Set Induction, Stimulus Variation, and Closure. These films comprise the skill cluster titled Creating Student Involvement, and are available at the Curriculum Resources Center.
3. Select a magazine article that deals with a concept suitable to your discipline. Using the article as a base, plan two or three ways to establish set. If possible, practice your set on a group of your friends or colleagues who might be interested in the topic of the lesson.

4. Using the same article as in activity #3 (above), assume that you have just successfully taught the appropriate content. Write in outline the sequence by which you would bring closure to the lesson. Discuss the results of activities 3 and 4 with your practicum professor.

5. Ask your practicum professor to schedule a time for you to visit one of the teaching stations. He will advise you about the activities you can expect to see and the progress of the class in the curriculum.

6. Visit the station and observe the class activities. Discuss the lesson and your own plans with the cooperating teacher.

7. Select a topic that can be taught to these students in a brief (15 minute) lesson.

8. With the help of the cooperating teacher, select a small group of (3-7) students for a micro-teaching exercise. Teach your lesson, using any method, but developing good set and reaching good closure.

Alternative: Develop an activity of your own design that will demonstrate your competency in the skills of set and closure.

Post Assessment: When you teach your lesson in activity #8 above, arrange to be observed by either your cooperating teacher or your practicum professor (or both). Have the observer complete an evaluation form on your performance. Arrange for a conference for evaluation of your performance on activity #8 as soon as possible after teaching.
REFERENCE SYSTEM DESIGNATION: 400.09.3

PROGRAM: MT. PLEASANT HS/PRACTICUM

COMPONENT: TEACHER PREPARATION PHASE

MODULE CLUSTER: TEACHER SKILLS

MODULE: FACTS, CONCEPTS, AND GENERALIZATIONS

DEVELOPER: MILBURN STONE

DATE: MARCH 1973

FIELD TESTED: MILBURN STONE & PETER PICCILLO, SPRING 1973
Suggestions

1. You may begin this module at any time in your practicum program. However, you may find it most efficient to work on this module after you have finished the module on writing objectives or concurrently with that module. This module should be completed before beginning the module on Inquiry and Thinking.

2. You may work on this module alone, but you can also work on the module with one or two fellow students.

3. Your visits to teaching centers can be used to satisfy the requirements for this module and several others simultaneously if this is your desire.

4. Activities 8 and 9 in this module might easily be integrated with activities in a number of other modules on teaching skills (lectures, small group discussions, writing objectives, etc.)
MODULE - FACTS, CONCEPTS AND GENERALIZATIONS

Rationale: The activities included in this set of experiences are designed to develop your ability to relate your knowledge of the social science disciplines to the secondary school social studies student. A professional teacher is an individual who knows something that society would like to have taught and who has the skill to teach it. This simple statement points to two areas of competence for the professional social studies teacher—knowledge of subject matter and skill in teaching. The purpose of this module is to help you begin to integrate these two areas of competence.

Objectives: Upon completion of this module you will be able to:

1. Distinguish between facts, concepts and generalizations in the social sciences.

2. Present a set of standards for evaluating the utility and importance of any set of facts, any specific concept or any single generalization as an object of learning in a social studies lesson, unit or curriculum.

3. Select and evaluate teaching materials for their conceptual content and the power of their generalizations from among materials commonly in use in public secondary schools.

4. Select and evaluate teaching materials for their conceptual content and the power of their generalizations from among materials not commonly in use in public secondary schools.

Pre-assessment: Read, Chapter III, "The Selection and Organization of Subject Matter," in Jack R. Fraenkel, Helping Students Think and Value, pp. 91-138. As you read this material, reflect on your own training in the social science disciplines. Look critically at Fraenkel's characterization of the basic ideas in each discipline. If you feel you already are competent in these areas, go directly to post-assessment. If not, go to Activities.

Activities: 1. As you study the chapter in Fraenkel (above), pay close attention to the footnotes. Develop a professional organization of subject matter around concepts and generalizations. Consult the items in your bibliography for further research and clarification.

2. For another point-of-view read James G. Womack, Discovering the Structure of Social Studies, pp. 1-68.
Activities (cont.):

3. If you find yourself lost or confused by this reading, consider the following suggestions:

   a. Find a friend who has already finished this module and ask him for help.

   b. Schedule an appointment with your practicum professor. Make sure the professor knows the general nature of your difficulty in advance of the appointment so that he can be prepared to help you.

   c. Join with several other confused souls in requesting a small group discussion or a lecture on this subject from your professor.

4. After you have finished your reading and discussion of this material, test your understanding with the exercises in Fraenkel, pp. 139-143. Check your answers on p. 399. If your self-testing reveals difficulties, consult your instructor.

5. Request your practicum professor to schedule a time for you to visit one of the teaching stations. Your professor can give you an idea of the material being covered on the day of your visit.

   Before you visit, check the appropriate material in the Providence Social Studies Curriculum Guides. (These guides are found in the Curriculum Center, Horace Mann Hall. They are listed under Providence Social Studies Curriculum Project.)

6. Visit the teaching station on the day of your appointment and observe at least one lesson. (You may want to observe several consecutive days at the teaching station. If you do, schedule the additional days yourself in consultation with the cooperating teacher at the center.)

7. During your visit to the teaching station, make the following observations:

   a. Make an inventory of texts and other materials available to the class in the subject area you are observing.

   b. Observe carefully the activities and experiences of the students in the class. Try to discover the objectives of the class and the unit of instruction in terms of the concepts, generalizations and facts the teacher has selected as the basis for instruction.

   c. After the lesson, talk with the teacher about the goals of his instruction.
Activities (cont.):

8. Assume that you will be teaching the class you have observed on the day following your final observation. Using the materials available to the class, select the individual chapter of passages of material you would have your students use as the basis for your class. Identify the concepts or generalizations which you would seek to develop with this material. Write them.

9. Assume that you will be teaching the class you have observed on the day following your final observation. Assume that you want to continue to work with the same general subject matter but that you would like to bring in some outside materials for the instruction. (Say, for example, in a lesson on current events.) Find material in the press or in other literature or material you have composed yourself to teach a concept or generalization which you have identified, organize it and write an activity based on it.

Post-assessment:

1. After you are satisfied with your general knowledge of the material covered in the reading assignments for this lesson, schedule a time to take a brief written examination on this material.

2. Bring the materials you have developed in activities 8 and 9 to your practicum professor. Justify the use of these materials by---

   a. Explaining the progress of the class observed.
   b. Explaining the concept you have selected to organize your instruction.

3. Arrange to teach your activity.
REFERENCE SYSTEM DESIGNATION: 400.06.3

PROGRAM: MT. PLEASANT H.S./PRACTICUM

COMPONENT: TEACHER PREPARATION PHASE

MODULE CLUSTER: TEACHER SKILLS

MODULE: QUESTIONING

DEVELOPER: PETER PICCILLO

DATE: FEBRUARY 1973

FIELD TESTED BY P. PICCILLO & M. STONE, SPRING 1973

REVISED: JUNE 1973 PETER PICCILLO
QUESTIONING

Rationale:

One of the most important skills in the repertoire of the teacher is that of asking questions. It is important for the beginning teacher to be familiar with the several types of questions and also to know when and how to use them.

Almost all learning is based on what is already known. The technique of questioning can be quite helpful in stimulating creative thought by leading students to find answers for themselves, and to apply past knowledge to new situations. Questioning can also be misused -- and may confuse students more than clarify issues or promote thinking.

The following points are to be considered when using questions:

1. Address the question to the class as a whole when in a group situation.

2. Pause after asking the question to allow pupils time to collect their thoughts.

3. When a question goes unanswered, leave it to be answered later. This is the technique of pre-cueing. Be sure to return to that question.

4. Ask questions of the entire class. Call on volunteers and non-volunteers. Avoid any pattern of calling on students such as by rows or boy-girl sequence.

5. Be careful about repeating your questions or the pupils' answers in order to get less teacher participation and more pupil response.

6. Learn to ask several students to respond when the question calls for more than just a single answer.

7. Ask for clarification when a response is not complete or if it is not clear.

8. If a question gets no immediate response, watch that you do not answer it yourself.

9. Frame the question so that you get the type of answer desired.
10. Don't ask the question in such a way that the answer is suggested.

11. Use a conversational, normal tone of voice when asking questions.

12. Realize that questions are asked to serve a number of purposes, among which are:
   a. to spark a discussion
   b. to obtain information
   c. to review or drill
   d. to test learning
   e. to solve problems
   f. to help develop concepts and thought
   g. for diagnosis
   h. to stimulate thinking

13. Become aware of some of the key words in questioning: how, why, when, where, which, what, compare, explain, describe.

Objectives:
When you have completed the exercises suggested in this module, you will be able to:

1. Formulate questions of several different levels of difficulty.

2. Identify and distinguish between the various levels of questions through observation of a real lesson.

3. Use questions of various types in a classroom situation.

4. Develop techniques designed to encourage students to analyze, synthesize, and arrive at new understandings.

5. Given a written dialogue of a classroom situation, correctly categorize the teacher's questions in terms of teacher intent with 90% accuracy.

6. Use the various levels of questions dealt with in this module in a classroom situation.

7. Using various techniques or vehicles, such as bulletin boards, introduction of a topic, brainstorming, quiz game, etc., induce a minimum of fifteen student initiated questions.

8. Given a list of representative questions categorize them according to the classification definitions included in this module.
Learning Activities:

1. Study the information provided in this module. You are encouraged to read beyond this, and to delve into the readings in the attached bibliography, as well as others you may discover.

2. Read the Manual, "Questioning Skills" (orange book) accompanying the film series "Teaching Skills for Elementary and Secondary School Teachers."

3. View the four films associated with Questioning Skills. (See attached list)

4. Using one of the dialogues supplied by your practicum instructor, (or one you have written yourself) identify each of the teachers' questions in terms of the four basic categories associated with this module. Schedule a conference with your practicum instructor to evaluate your proficiency.

5. Using content and grade level of your choice, develop a series of questions demonstrating your mastery of each of the four skills described. Arrange with your practicum instructor for a demonstration or conference. You may wish to correlate this activity with your module on lesson and unit planning.

Post Assessment:

After a planning session with your practicum instructor, arrange to do the following:

In a micro-teaching situation of approximately 10 minutes in length, teach a concept in which you:

1. Ask questions fluently using each type of question at least once.

2. Ask questions in sequence (s) designed to cause students' responses to progress smoothly from one cognitive level to another.

3. Rephrase and/or redirect your question so as to allow students time to think before responding, and to encourage more students to become involved.

4. Help students to discover answers among themselves by relating your questions to prior student knowledge and experience.

5. Vary your questioning patterns, and provide an element of suspense so as to maximize student interest.
Alternatives:

Design your own activity(ies) to demonstrate your competency in the skills of questioning.

BIBLIOGRAPHY - Questioning

Francis P. Hunkins, Questioning Strategies and Techniques. (Boston: Allyn & Bacon, Inc., 1972)


FILMS - Questioning (Available at C.R.C )

Fluency in Asking Questions II-1s

Probing Questions II-2s

Higher Order Questions II-3s

Divergent Questions II-4s

There are various categories of questions which differ in terms of level of difficulty and the task(s) called for.

Questions are categorized according to the level of intellectual difficulty and the complexity of task(s) required for appropriate responses.

1. **Recall**: (simple) narrow questions calling for facts or other items involving rote memory. Also include in this category are questions which call for a simple yes or no answer. Example: What is the longest river in North America?

2. **Probing questions** call for the analysis and integration of given or remembered data. Probing questions are designed to draw out and build upon simple responses. Problem solving and reasoning are often necessary in response to such questions, as well as the application of more than one recall item.
   Example: What geographic factor accounts for the importance of this river?

3. **Divergent questions** call for answers which are creative and imaginative and not empirically provable, i.e. may or may not have "right" or "wrong" answers. The student is compelled to speculate, to infer, to develop new and creative hypotheses.
   Example: How might the development of the central part of the United States have been different if the Mississippi River were not there?

4. **Higher Order questions** demand more than mere knowledge of facts, and force the student to analyze, draw inferences, discover relationships, make judgements, and formulate arguments in defense of their choices. They frequently include the work "why". Example: During which period in American History would you have preferred to live along the banks of the Mississippi River? Why?

Questions can also be classified as either broad or narrow.

1. **Narrow questions** place limits on the response called for.
   Example: What are the three basic components of a good salad?

2. **Broad questions** do not restrict the amount of recall data called for.
   Example: What are the skills necessary for the construction of a house?
EVALUATION FORM - Questioning

Name of Teacher

What was the concept?

What did teacher do to establish set?

During the lesson, how many questions of each type were asked?

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<td>Simple (recall)</td>
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Please comment on the effectiveness of the teacher's use of questions.

In Lesson Plan

In Micro Teaching (fluency)

What did the teacher do to summarize and evaluate what was learned? How well and why?

Signature of Evaluator

T. Let's say that you were President Kennedy in 1962. It's just before a congressional election and the Republicans are criticizing your administration for being "soft" in the face of the determined probes of the Soviet Union. You, yourself, have recently returned from a conference with Khrushchev in Vienna which did little but increase tensions between the U.S.A. and the U.S.S.R. Suddenly you begin to receive reports which are unquestionably accurate that the Russians are establishing missile bases in Cuba. Some are nearly operational and many others are nearly operational. How would you feel?

S1. I think I would feel afraid?

T. Why so?

S1. Well, that's a threat to our country and even to all life because you know that if there are rockets there there must also be H Bombs. And what are they going to do, attack us?

T. Does anyone think the president might have another reaction?

S2. I don't think it would be fear so much as anger. After all, he is the president. Maybe there is a little fear there but it certainly isn't like he is in a panic or anything. But, personally, I would be angry if this happened. It's just the kind of thing to expect from an enemy.

T. Well, of course, it's hard to really know how a person felt, but exactly what did Kennedy do?

S3. He gave a speech to the people.

T. Is that the first thing he did?

S4. No. First he gathered all of his advisors around him.

T. Ok. Let's talk about that for a minute. We'll be back to the speech later, because that's important, S3. Exactly who did he gather around him?

S3. Bob Kennedy....

T. Who was?

S3. The president's brother.

T. Right, but was there any other role that Bobby Kennedy played?

S3. Oh ok. He was the attorney general.

T. Fine. Let's try to identify these people as precisely as possible. Besides the attorney general Robert Kennedy, who else was involved?

S5. Well, there was Robert McNamara the Secretary of Defense and there was Adalai Stevenson the ambassador to the United Nations and there was Maxwell Taylor, who was a retired general and special assistant to the president and there were the members of the Joint Chiefs of Staff and there was McGeorge Bundy--I'm not too sure who he was.

T. Does anyone know about McGeorge Bundy?
S6. Yeah, he was another special assistant to the president for national security affairs. He was like Maxwell Taylor.

T. OK, so he has them all together. Now what did they do?1

S2. Well, first they really gathered some more information. Make sure they were really right and made sure they really knew what was going on there.

T. What kinds of things were they especially interested in finding out?

S3. They wanted to make sure that they could really identify all of the rocket sites. They wanted to know how many days each site would take for completion and they wanted to know if the crews were Russian or Cuban and how many Russian boats were in Cuban harbors on route to Cuba.

T. Did the president participate in these discussions?13

S1. No.

T. Why not?14

S1. Well, he would stop in from time-to-time and he would come in when the group wanted to present him with their thoughts. He didn't participate all the time for a couple of reasons. First of all, he didn't want to cancel all his appointments and things because this would alarm people and would make for a lot of comment in the press. Secondly, he wanted the advisors to feel free to discuss things and take positions without having him around. There is always a certain amount of fear of the president and some people are afraid to stand up to him.

T. Fine, what things can we learn about the real nature of the presidency from this?15

S3. Well, for one thing people don't look at the president as just an ordinary man. Some of these people were the president's good friends from before he was president and all of these men were used to being around powerful people—they were powerful themselves—and even they couldn't really be free when they were around him.

T. Do you think this helps him do his job or does it hinder him?16

S3. In this case, I think it definitely hindered him. There might be other cases when it could help him.

T. Do you have an example?17

S3. Well, we said that the president can also be a moral leader. Well, in that case perhaps it isn't so bad that people look at him in a special way.

T. What about the president's position in the public eye. Here is a man who is so well-covered and so well-watched that he can't even have the privacy to make a decision without causing public comment that might influence the decision. Does this have a good and a bad side?18

S5. I think everyone can see the bad side. Here again, the president found his freedom to function limited by this. It's a fishbowl existence and I don't see how you can turn that into a good thing. Also, look at what it must do to the person psychologically. How can a president handle his ego in a situation like that. It isn't really healthy.
T. Let's come back to the psychological problem later. Can anyone see how the president's unique relationship to public opinion is useful? 19

S3. Oh, I can see it is useful sometimes. But that isn't the question you asked.

T. Oh, what did I ask? 20

S3. You said that here is a man who is so well covered by the press and the people that he can't even have the privacy to do a special job. Now, when that happens, that's got to be a problem. It was to a certain extent here. The Republicans were criticizing the president so strongly that it really handicapped him. Even while he was responding to their criticism they were attacking him.

T. Does any other person have a thought here? 21

S3. Yes, I think that they are really the same thing. In a democratic country the president has to deal with publicity. It can be a good thing and it can be a bad thing for him. It's a paradox.

T. Paradox. That's a good word. How would you define the paradoxical situation of the president with respect to communication? 22

S3. Well, he's damned if he does; damned if he doesn't. That's a paradox. Damned if he does or doesn't communicate, I mean.

T. Oh, Can anyone make sense more out of the paradox of the president? Is there anything in our system that helps the president solve this problem? 23

S2. I think I can. The way a person gets to be president insures that we will have a man good at communication and swaying public opinion.

T. Well, what about the Cuban missile situation? How did Kennedy solve the paradox? 24

S3. Here's where my speech comes in.

T. Good. Will us in on the speech please, now's your big chance.
Discuss. II (continued) The Missile Crisis. International Politics.

2. Why did President Kennedy think it necessary to place our bombers on alert during the Cuban Missile Crisis?

S3. To defend against the Russians.

T. But weren't the Russians always a threat during this time? They had missiles in other places and the power to use them. What was so special about Cuba?

S2. Well, this time the missiles were only ninety minutes away.

T. Ninety minutes away?

S2. Oh, I meant ninety minutes away. Actually they were only a few minutes away. Actually, that was the real deal right there. Our whole defense against the Soviet Union was based on the idea that even if the Russians did attack we could strike back because we would get about 20 to 30 minutes warning. We could then get our planes in the air in time to destroy Russia. Since they knew that, they couldn't ever attack us. But Cuba meant that they could knock out our defenses without the risk of a counterattack.

T. So it wasn't just a matter of adding more missiles to the arsenal. There was a real change in the nature of the threat we were being asked to accept, is that right?

S2. Right.

T. Oh. The book used a phrase to explain a situation such as we have here. Can anyone remember that phrase?

S3. Massive retaliation.

T. Oh, That's a good phrase and that is surely accurate. I was thinking of another phrase but I see now that I didn't make my question clear. When two nations have large military establishments and can make other nations respect or even fear them we say that those nations have what?

S5. Strength.

T. Fine. Another word for strength, please?

S4. Power.

T. That's good. We'll just stick with power, even though strength carries the same meaning for us, ok? How what do we call it when these two nations are about equal power. They can each do vast damage to the other. No person could predict who would win in a war between them. What is this situation called?

S6. Oh I remember from the book—the balance of power.

T. Fine. Why then the Russians put the missiles in Cuba, what happened to the balance of power between the Soviet Union and the US?

S3. It would be out of balance.

In whose favor?
S3. In the Russian's favor.
T. From whose point of view?
S3. What?
T. From whose point of view?
S3. I don't understand?
T. You would say that the power was out of balance, the US or Russia?
S3. I guess the US could say so but I think the Russians might say so too, after all, it is or it isn't.
T. Well, let's just say that you were a Russian leader and I was the American president and I say to you: "Alexei, why did you upset the balance of power with those nasty missiles in Cuba? Don't you know that only by keeping the balance of power between us can each of us be sure that there will be no attack or war?" What would you reply to that?
During 3: Divorce, Population Mobility, Tradition, Technology, etc.

T. Yesterday I said that there were several reasons for the growing divorce rate, the increase in child abuse, the increase in child abuse and abandonment and other ways that the family is breaking up as an institution that people used to preserve. What can make one?

S1. Population mobility, that's one.

T. Population mobility. What does that mean?

S1. Well, it seems that people are moving around a lot. They don't stay in one place anymore.

T. OK. Is what the other reason we talked about?

S2. Oh, the fact that there are people who don't...you know...they don't go to...that don't believe in God too much and they don't show the same old respect to the church. Church attendance is going down all over the place, you know.

S3. Yeah, churches are really just dying out and neighborhoods are dying too. Look at all the little towns that are dying out. We drove from Chicago to Montana one summer and you can just see it--all across Iowa and Nebraska--little old farm towns just empty with no people or only old people.

T. OK. People losing faith in God. People losing faith in religious leaders. People leaving old neighborhoods and old towns. Old beliefs dying out and maybe no new beliefs coming in to take their place. What's the title we gave to this yesterday?

S1. The decline of tradition.

T. The decline of tradition. Do you agree with that S2.

S2. Uh, yeah, I guess so?

T. What about you, Sh.6

S4. Sure, right.

T. OK. That's a good name and it's what we said yesterday. Now we have mobility increasing and the tradition declining. What's the divorce rate doing?

S3. It's declining, too.

T. Well, uh...The rate is declining...could you explain what you mean by this?

S3. Well, there are less and less of good marriages--they are getting fewer and fewer so the rate is going down.

T. The rate of what?

S3. The rate of marriages.

T. The rate of what kind of marriages. You are saying that people are not getting married as much--what kind of marriages?

S3. The rate of good marriages.
T. Can someone give S3 some help? Here having trouble with one word here. what is it?

S5. Well, let's get the word rate switched around. The divorce rate is going up. That is there are more and more divorces for a certain population, so the rate as a percentage increases.

T. That's good. Rate is a percentage of a certain population. S3, you had the facts right. you just misunderstood that I was asking for the rate of divorces, what did you give me the rate for?

S3. The rate for marriages. I see now.

T. Oh, so population mobility is increasing in America, is that right?

S6. Yes.

T. And traditions are declining, we said that, right?

S2. Right.

T. So what are divorces doing?

S7. They are increasing.

T. So, S3, the rate is doing what?

S3. It's increasing, too?

T. Now, how do we know that all these things are related?

BIG SILENCE AND NERVOUS TWITCHING

T. Well, that's a hard question. Look. All these things are happening at about the same time. We observe them happening together. What is hard to do is to put these things into some kind of order, so you can say that one thing caused the other which caused the next things. Now, what are the things we have been talking about?

S2. Divorce, mobility and tradition.

T. Good. Now what follows what?

S6. Well, I would say that it was the mobility first that caused the decline in tradition and that when tradition declined people started to get divorces more often.

T. Does anyone want to offer a better suggestion or another explanation?

S1. Wait a minute. I don't have a better one. I just want to say that there is something strange about this talk. It isn't surprising that the tradition decline relates to the rise in divorces. You are just talking in circles.

T. What do you mean?

1. Well, staying married is a tradition. It's part of that idea. So if we say that traditions decline we shouldn't think that we are saying something different when we say that marriages are declining or that divorces are going up.
To: Now, that's fantastic. I hadn't thought of it that way myself. How did you get on to that?

Sl: I don't know, but it just came to me when you were talking about the confusion over rate with S3. See, since one thing is going up and the other is going down, we think we are talking about different things, but it is just that we are playing with words and not with real facts.

To: Terrific. I think you should give S3 a little of the credit for this though. Now I think you have just simplified our problem. Can anyone suggest how this is so?

SILENCE

To: Well, it's your idea, Sl. Do you see how it has helped us?

Sl: I'm not sure.

To: Well, we started out having to explain the relationship between how many factors?

S3: Three. Divorce, tradition, mobility.

Sl: Then I see. Now we only have to deal with two because I said that the divorce category was really just a part of the tradition category.

To: Mighty fine. Ok, any opinions now?

Silence.

To: Ok. Who can state the problem now?

S5: The problem is: Which came first the mobility or the decline in tradition.

To: Fine. Ok, S6, you already have an idea on the floor. State it again for us, will you please?

S6: I said it was the mobility first and tradition second.

Sl: Well, the only other alternative is tradition first & mobility second.

To: Good, see how much simpler you made the issue. Now, let's state this relationship as clearly as possible. S6, make your statement in a clear statement.

S6: I said: An increase in population mobility leads to a decline in tradition.

To: Sl.

Sl: Well, just for the sake of argument, I say that decline in tradition leads to an increase in mobility of population.

To: Ok. Now, I think we better put this back into the real world. Let's get some facts into your statements. S6, what country are you talking about and for what time?
REFERENCE SYSTEM DESIGNATION: 400.03.3

PROGRAM: MOUNT PLEASANT HIGH SCHOOL/PRACTICUM

COMPONENT: TEACHER PREPARATION PHASE

MODULE CLUSTER: TEACHER SKILLS

MODULE: RESPONDING: VERBAL AND NON-VERBAL

DEVELOPER: KATHERINE MURRAY, PETER PICCILLO

DATE: MAY 1972

FIELD TESTED BY: K. MURRAY & P. PICCILLO, SPRING 1972

FIELD TESTED BY: P. PICCILLO & M. STONE DATE: SPRING 1973

REvised BY: P. PICCILLO, JUNE 1973
Rationale:

It is important to understand that there are both verbal and non-verbal components to responses made in the teaching-learning situation. This exercise will give you the opportunity to identify, analyze and develop skill in the use of certain specific verbal and non-verbal responses. As a result, you will expand your response repertoire, become aware of when and how to convey emotions and meanings and thereby increase your effectiveness in communication.

Objectives:

In completing this exercise, you will be able to:

1. Identify the various emotions that can be conveyed both verbally and non-verbally in communications.

2. Select and use the appropriate responses (verbal and non-verbal) that will be effective in a specific learning situation.

3. Increase the quality and quantity of your response repertoire.

4. Re-enforce student responses verbally and non-verbally.

5. React to student responses so as to elicit further more complete responses and/or responses more relevant to the subject at hand.

Pre-Assessment:

Observe a teaching-learning situation. List the various emotions that are conveyed verbally and non-verbally by the teacher. Describe the techniques used to convey these emotions. This should be written in your practicum journal.

Activities:

Verbal Responses


2. View the films associated with skill described: Response Repertoire ie., "Verbal Responses" "Non Verbal Responses", Verbal and Non Verbal Responses".
3. Select from the list of statements provided in the book Response Repertoire, 10 statements you want to deliver in verbal response. For each statement, choose three meanings you want to express. Practice your delivery.

4. After you feel you have practiced sufficiently, ask someone to act as a critic and listen to your delivery.

Provide them with a copy of the statements and ask them to write the 3 emotions or meanings conveyed by your delivery next to the statement. Compare with your critic the meanings you had planned to convey and the meanings he understood. Re-deliver those statements that did not convey the meaning you had planned.

Post-Assessment:

When you feel you have succeeded in mastering the skill of Verbal and Non-Verbal Responses, talk to your Practicum Professor about a post-assessment activity. This may be a mini lesson on Video Tape in which you can also demonstrate your skill in objectives, set and closure, or it may be an exercise in verbal and non-verbal responses with the Practicum Professor. Perhaps you can think of another way in which you can demonstrate your competency in these skills.

You may wish to correlate this module with that on small group work. In any case, you should work constantly on response skills until you automatically utilize gesture, facial expression, and voice, to augment your facility in communication.

Your facility in verbal and non-verbal responses must be demonstrated in the laboratory schools in a real classroom situation. You should indicate to your observer/evaluators, when you would like to demonstrate your proficiency. As indicated above, use of such skills is frequent and ongoing, thus demonstrating proficiency on a one-time basis is inadequate. You will be considered proficient in these skills only as you incorporate them into other appropriate teaching-learning situations throughout your Practicum term.
REFERENCE SYSTEM DESIGNATION: 400.04.3

PROGRAM: MOUNT PLEASANT HIGH SCHOOL/PRACTICUM

COMPONENT: TEACHER PREPARATION PHASE

MODULE CLUSTER: TEACHER SKILLS

MODULE: SMALL GROUP INSTRUCTION

DEVELOPER: PETER PICCILLO

DATE: FEBRUARY 1973,

REVISED: JUNE 1973 PETER PICCILLO

FIELD TESTED BY: PETER PICCILLO - MILBURN STONE, SPRING 1973
MODULE - SMALL GROUP INSTRUCTION

Rationale:
Many of the learning activities in contemporary secondary schools utilize the small group as a vehicle. Some of the advantages of the small group for certain activities are quite obvious. Some others are not so obvious. Too often the technique is mis-used, so that the small group degenerates into a bull session-type social hour, with clusters of people talking, but not really saying anything. Noise and activity do not necessarily indicate learning.

It is hoped that after your completion of this module you will be proficient in the use of several small group teaching techniques, and also be aware of the possible pitfalls of the misuse of the technique.

Objective:
The learner will be able to:

1. Demonstrate a knowledge of the structure and functions of at least seven of the following ten types of small group techniques.
   a. open discussion group
   b. tutorial group
   c. assigned roles group
   d. research group
   e. task flexibility group
   f. investigative group
   g. group talk group
   h. brainstorming group
   i. socratic-analysis group
   j. value clarification group

2. Demonstrate a knowledge of criteria for deciding the propriety of use of small group technique and the selection of the most appropriate small group format to meet specific learning objectives with specific pupils.

3. Select and/or design a group activity appropriate to specified learning objectives.

4. Demonstrate competence in facilitating learning through use of the small-group technique in both micro-teaching and actual classroom demonstrations.
Materials Needed: See bibliography attached.

Pretest: None

Activities:
1. Read IDEA pamphlet (starred in bibliography). Prepare note cards on the various types of groups discussed. Include objectives, size, purpose, teacher and student roles, and techniques for use of each method.

2. Read IDEA pamphlet, pp. 1-16. Discuss the material presented there with two of your colleagues. Decide among yourselves the meaning and importance of the concepts presented. You may wish to utilize one of the described small group formats to resolve your differences, if any.

3. Schedule a meeting with your practicum instructor at which you will be given an opportunity to demonstrate your mastery of small group theory.

   N.B. Should you at any point find it necessary or desirable to go beyond the pamphlet for fuller information on any of the concepts presented therein - you are strongly encouraged to avail yourself of the material listed in the appended bibliography.

4. When you have completed activities one, two, and three, address yourself to the tasks set in Objectives 3 and 4. After consultation with your practicum instructor, arrange for scheduling classroom time for your competency demonstration. Do it.

Post Assessment: Evaluation by observers of competency demonstration.
BIBLIOGRAPHY

Small Group


Schmuck, Group Processes in the classroom. pp. 108-120.

IDEA in-service film entitled. "Change -- Training Teachers for Innovation." P.O. Box 628, Far Hills Branch, Dayton, Ohio 45419
REFERENCE SYSTEM DESIGNATION: 400.07.3
PROGRAM: MT. PLEASANT HIGH SCHOOL/PRACTICUM
COMPONENT: TEACHER PREPARATION PHASE
MODULE CLUSTER: TEACHER SKILLS
MODULE: LECTURING
DEVELOPER: PETER PICCILLO
DATE: FEBRUARY 1973
REVISED: JUNE 1973 PETER PICCILLO

FIELD TESTED BY: P. PICCILLO & M. STONE, SPRING 1973
Rationale:
Traditionally the teacher's role has been mainly one of an authoritative information giver. Happily, this stereotype has almost been eliminated. The lecture method however, when properly used, remains a valuable tool of the teacher, since it can be an efficient and effective means of dealing with groups of pupils.

Objectives:
When you have completed this module, it is expected that you will be able to:

1. List and identify the component parts of a lecture.

2. Describe at least five (5) learning situations appropriate to the efficacious application of the lecture method.

3. Effectively organize and present materials and information in lecture form which builds on prior knowledge and experience of students, especially through the use of analogies.

4. Utilize verbal and non-verbal cueing, charts, graphs, posters, pictures and AV materials as part of the lecture demonstration.

5. Sum up and restate major points of the lecture presentation, and relate them to ongoing learning activities. (closure)

6. Use your voice effectively by varying the pitch, level, volume, and tone of speech so as to stimulate interest and communication with the students. (stimulus variation)

Activities:
1. Find three or four other students and decide among yourselves the most effective uses of the lecture method. List them. Next decide what ought to be the component parts of a lecture, and the skills required to lecture successfully. List them.

   For example: Component parts Skills
   a. objectives a. speech clarity
   b. visual aids b. eye contact
   c. set c. etc........
   d. etc........

2. When you have compiled your lists, obtain viewing sheets and view the films listed below. Respond to the questions and directions found in the viewing sheets and compare your findings with the information found in the films. You may view the films more than once if you feel it necessary.
Activities (continued):

The films, located at the CRMC are:

Also, "Informal Lecture" - Panhandle Education Cooperative.

3. Read enclosure -- "Learning through lectures."

4. With the aid of your Practicum instructor, choose a topic and prepare a ten minute lecture on it. Develop and hand in in written form a complete outline of your lecture including a list of objectives, and a bibliography of the source material of your lecture. Include all charts, pictures, posters, as well as a list of any A-V or other teaching aids to be employed.

5. Design your own learning activity based on the objectives stated in this module. After conferring with your Practicum advisor, and receiving his approval, do it!

Post-Assessment: Arrange for video-taping of your lecture to a live audience, as well as for observers to look for the components you have included in your lecture.

After taping, discuss with your observers whether and how well you have demonstrated the lecture method. Review the tape. If necessary -- redo the lecture, correcting any deficiencies noted by your observers. Arrange to view the final tape with your Practicum instructor.

After taping, or if video-taping is found to be logistically impossible, see your Practicum instructor to arrange a live performance - critique - evaluation of your lecturing competency.

Completion of this module requires performance of lecture in real classroom situation.
1. What are the major elements of a lecture?

2. When and why would you choose to use the lecture method? List at least five situations.
   
   a.
   
   b.
   
   c.
   
   d.
   
   e.

3. Be certain to observe carefully the various techniques used to increase the effectiveness of the lecture-presentation. Please note that it is much more than just talking, or worse yet, reading to people.

   What did you notice?

   a.
   
   b.
   
   c.
   
   d.
   
   e.

4. Revise your list of lecture skills, if necessary. Be prepared to justify your selections.
An effective lecture is a lesson, and as such it shares all the characteristics common to effective lessons in the social studies. It must have a significant aim or purpose which should be understood by the audience and should be returned to frequently by the speaker during the lecture and certainly toward its end. The lecture should be motivated by relating the speaker and/or the topic to the audience.

A lecture may not necessarily have pivotal questions, but it should surely have a number, perhaps no more than five or six, pivotal points. These points might be written on the board to serve as a guide to your talk and to facilitate the taking of notes by the group.

A summary and a review are in order toward the end of the lecture. One of the best ways to accomplish this is to return to the aim of the lecture and to your motivating device.

Just as you must prepare your class lessons well, so you should prepare your lectures with meticulous care. This involves a knowledge of the group to whom you are speaking (something of I.Q., general background, age and previous learning and experiences), as well as a substantial knowledge of the topic on which you have been asked to speak. A lecture should enhance and enrich the topic, and merely restating orally what the group's text says in print is shirking your responsibility. You must achieve some originality by suggesting alternate approaches in terms of organization, emphasis, or detail, thus presenting new viewpoints or crystallizing material in a different way. This, after all, is the single greatest justification of the lecture and of team teaching. A lecture must be a display of your learning.

Although detailed preparation is imperative, do not prepare so well that you find yourself delivering a "canned talk" which makes no allowance for a student's question or some other interruption in procedure. As a matter of fact, it is usually best not to think of yourself as a lecturer at all, since this suggests a pompous, rather oratorical approach. Instead, plan to talk to your group from an outline, drawing on the comparisons, analogies, and illustrations you have prepared, but freely adding others that come to mind as you think aloud before your group.

Watch the faces of your audience, especially those toward the rear. The expressions may tell you that you are speaking too slowly, too rapidly, or inaudibly. If notes are to be taken by the group, pace yourself so that students can record all important points. Although you should not speak so slowly that students will be tempted to write every word, you should probably make your pivotal points more than once and provide more than one comparison or illustration for each.

Despite the fact that you have a large audience, try to get some active participation. For example, you can begin some talks with a question that asks for a...
.show of hands: "How many of your parents voted in the November elections?"
From the hands you might call on one or two students to provide brief answers to the follow-up question of "Why is intelligent voting the backbone of democracy?" Or you might ask a student sitting toward the front to point to a place on the map, or perhaps even to hold a picture. Where possible, make at least a token attempt to involve your audience actively. You can have students provide a summary, perhaps even in response to a rather unimaginative question, "What main points did you note in today's talk?"

Use the blackboard freely and make effective use of whatever other illustrative materials you have prepared. The blackboard is the single most important visual aid, and in a talk particularly it can serve as a guide if properly used for outlining, to record the spelling of names, or to jot down important dates. Moreover, more than one teacher even when speaking to an adult audience feels more at home holding a piece of chalk in his hand. In addition, by turning to the board now and then, or to the map, your movements become natural and your breath more relaxed.

This summarizes briefly the preparation required of the social studies teacher who has been asked to give a talk to a large group as a member of a team of teachers. But what about the preparation of the class? After all, we pointed out that for any successful lesson the preparation of the class is just as important as the preparation of the teacher. You may not be able to control part of this preparation since the group coming to you may be quite strange. Nevertheless, the team members should decide in advance what steps must be taken to prepare students for a talk. Because as a member of the team you have had a voice in determining the advance preparation, you can assume that some or all of the following has been done:

1. Team members have assigned readings in texts or in supplementary materials.

2. Small-group discussions have been held to identify problems and to anticipate areas where additional information is required. You will therefore be looked to to supply some of that information.

3. The groups have been told to take notes and perhaps have been given a mimeographed form to follow as a guide.

4. The groups have been told to jot down questions that come up and to bring them up once again in a small-group meeting if they are not answered in your lecture or in a question period afterward.

ASSESSMENT OF LECTURE/Demonstration

I. Objectives: (yes or no response)
   A. Stated clearly -- understood by pupils
   B. May be efficiently accomplished through lecture method

II. Format (check one)
   A. Formal
   B. Informal

III. Purpose of Lecture (check those which apply)
   A. Motivation (set)
   B. Introduce new materials/concepts
   C. Synthesis/summary of pupil learnings
   D. New Interpretation of data
   E. Presentation of data
   F. Other (specify)

IV. Time element in relation to stated objectives
    (yes or no response)
   A. Realistic in terms of mental age of students
   B. Realistic in terms of chronological age of students
   C. Realistic in terms of anticipated attention span of students

V. Effective Use of voice (yes or no response to each)
   A. Intensity (proper loudness level adjustments)
   B. Enunciation (careful articulation -- can speaker be understood?)
   C. Pronunciation (did lecturer adhere to acceptable standards?)
D. Flexibility of voice  
(sufficient to alleviate boredom)  

VI. Effective use of body behavior during lecturer  
(yes or no response)  
A. Eye contact  
(sufficient to establish contact with class)  
B. Posture  
(natural and relaxed)  
C. Gestures  
(used to emphasize ideas)  

VII. Types of verbal support used  
(check appropriate blanks)  
A. Explanation  
B. Analogy or comparison  
C. Illustration  
D. Refer to specific instances  
E. Use of statistics  
F. Testimony  
G. Restatement  

VIII. Types of visual support used  
(check appropriate blanks)  
A. The object referred to in lecture  
B. Models  
C. Slides  
D. Movies  
E. Maps  
F. Blackboard drawings or overhead projector  
G. Graph  
H. Diagrams  
I. Organization Charts  

IX. Did lecture allow time for:  (yes or no response)  
A. Restatement or summarization  
B. Concluding statement
REFERENCE SYSTEM DESIGNATION: 400.05.3

PROGRAM: MOUNT PLEASANT H.S./PRACTICUM

COMPONENT: TEACHER PREPARATION PHASE

MODULE CLUSTER: TEACHER SKILLS

MODULE: LESSON AND UNIT PLANNING

DEVELOPER: PETER PICCILLO

DATE: FEBRUARY 1973

FIELD TESTED BY P. PICCILLO & M. STONE - SPRING 1973

MODULE REVISED BY P. PICCILLO, JUNE 1973
Rationale: Teaching is simple really. So is writing a book or building an automobile. All you have to do is decide what it is you are going to teach - justify what it is you are going to teach, decide how you are going to do it, collect and assemble the proper materials, decide on the methods you will apply in doing what you want to do and devise a way in which you can determine if and how well you have accomplished what you set out to do. This is called planning.

This experience will deal with the ways of planning a single lesson.

Objectives: When you have completed the activities in this module, you will be able to:

1. Recognize, list, and describe the necessary components of a lesson plan.

2. Select appropriate lesson topics and conceptualize alternative methods of teaching them.

3. Find and/or develop materials and select teaching methods to support and best implement the objectives of the lesson.

4. Utilize the aforementioned skills in the construction of a competent:
   a. lesson plan
   b. unit plan

Pre-assessment: Do 1-4 above.

Activities: 1. Read the enclosures accompanying this module.
   a. "Lesson and Unit Planning"
   b. "Lesson Planning"

2. After consulting the Providence Social Studies curriculum guide (or other appropriate curriculum guide containing long and short range learning objectives), select three (3) topic areas you feel would be proper for a single lesson.

You may wish to combine this module with some of the skill modules such as lecturing, small group, etc., particularly in constructing your unit plan. This will enable you to build in opportunities to demonstrate competencies of planning and execution, and avoid paperwork unrelated to a real classroom situation. To that end, consult with your Practicum instructor and/or cooperating teachers before selecting your topic.
Discuss your choices with at least two of your colleagues. Decide on criteria for selection of topics. Write them down. Select from among the nine possible topics those which best fit the criteria. If none - go back and repeat step #1. If more than one, resolve your differences and agree on one or two that you believe suitable.

Report to your practicum instructor - the results of your deliberations so far - i.e. the criteria for selection, the topic chosen, and the reasons (relating the topic to the criteria). Write your learning objectives for the lesson in behavioral form. (refer to Module 400.03.4). Be prepared to defend your choice.

3. Your next task is to find and/or develop materials to convey your objectives. Decide, with your two colleagues, where one would most likely find relevant materials. If your discussion bogs down - you may want to refer to some or all of the following.

   a) Textbooks - bibliographies
   b) Film catalogues
   c) Film-strip catalogue
   d) Picture files
   e) Library
   f) Curriculum Resource Center
   g) People - resource people

If you decide to use audio or video-tape as a teaching-learning device, discover and list the operating capabilities and procedures necessary for the acquisition of any machines needed. For advice in reproduction or revision of audio-visual materials, consult Prof. Roy Frye, Department of Instructional Technology, HBS-205 or members of his staff.

4. When you have developed your lesson plan to your satisfaction - schedule an interview with your practicum instructor. At this time your plan will be evaluated and discussed.

Post Assessment: Same as Pre-assessment.
Why Plan?

A traveler would rarely set out to make a trip of any distance or any consequence without charting in advance where it was he intended to go and how he planned to get there. The same thing is true of teaching. Since we recognize the tremendous importance and complexity of teaching, it seems totally unreasonable to expect to be able to accomplish desirable goals without charting in advance the goals themselves and the course that will be taken to arrive at them. This, of course, is the overriding reason why teachers need to plan. Let us begin by looking at lesson planning and some reasons why this level of planning is necessary. Although the content of this paper is oriented to the familiar group presentation of material, the same basic principles apply in individualized programs.

We often find it possible to drive over a familiar course or to go through a familiar routine without noticing the steps along the way or taking note of the points of interest as we pass them along our route. We find that many illustrious persons have stated that they do their best thinking while engaged in some routine task, in shaving, in driving to work and so on. The reason behind this is relatively simple: As we pass over familiar ground it is easy to overlook those things which are most familiar. The first reason for lesson planning is to avoid precisely this. Since we will rarely teach our students at the intellectual level equivalent to that at which we have studied a subject, it becomes very easily possible to skip over points which are so familiar to us that they should be obvious to anyone - except, of course, someone encountering them for the first time. The danger of this becomes particularly real when we think of repeating a lesson in relatively similar forms several times to different classes in a period of a few days. The possibility of missing key points becomes very real in these circumstances. We would think it strange if the bus driver suddenly retraced his route to make up a stop which he had missed, yet we often find teachers doing precisely this to make up a point that they overlooked in passing. Even a minimal lesson plan can help here.

A lesson plan helps avoid skipping over key points. Even if the material which is to be studied is not outlined in detail in the lesson plan, the inclusion of significant points, as will be shown in the outline of the contents of the plan, has the effect of cementing them in the teacher's mind and of placing them in an available position for inclusion at a logical point in the lesson.

If you can imagine the feeling which a person might have after he had stepped onto a third floor balcony to attract the attention of a crowd only to
discover that he had forgotten to put on his trousers, you have somewhere nearly equalled the feeling that a new teacher may expect to have when he discovers that he has suddenly presented his entire lesson in the first nine minutes of the class period, and is now left to wonder what comes next.

A plan which is prepared around a block of content material, rather than one prepared to fit into the space of a single class period can be helpful in avoiding the "no pants" feeling. Such a plan will usually provide content for a period of several days, with room for adjustment for the rate at which the class assimilates the ideas of the lesson, or miscalculations by the teacher on the degree of enthusiasm with which a particular activity may be met. As a rule, any time schedule which must be followed closely is an inhibitive factor in using a lesson plan unless the teacher is completely unable to pace himself through the class activity. A general plan which covers several days' activities allows flexibility to adapt to varying classroom situations while still providing needed direction.

Planning which has locked carefully at a teacher's reasons for teaching a lesson will help him to avoid running out of ammunition. This is not to suggest that a lesson plan can include provision for all contingencies; this would of course be impossible; but by the same token, the lesson plan can and must provide the teacher with the help he needs to pass through the period of class time without appearing to be groping for ideas or having to improvise as the lesson progresses.

Advance planning allows a lesson to proceed in an orderly sequence, since it does not require that the teacher be dependent upon meeting each situation as it develops. The plan should provide the teacher with means by which he can help to trigger certain desired developments in his class. Planning serves also in this third realm in helping the continuity of a lesson development, since it provides the teacher with a record of what was taught the day before and allows him to relate and adapt succeeding lessons to what has been done in the past, without having to rely simply on his memory of what has occurred. A record of what has been taught is particularly helpful when the teacher finds himself on the night before a promised test with nothing for company except a need to write some questions.

An additional valuable outcome in the realm of continuity is the advantage of continuity over a period of years. Since the teacher has in his possession lessons taught in past years, recorded in the form of lesson plans, it becomes possible for him to review these plans and by so doing to approach similar topical points in his class in succeeding years with significantly improved insight. It may be that the lesson plan used in the preceding year, with only limited modification, may well be adapted to repeated use. But a word of caution is in order here: Remember that no two classes will be alike, and a lesson which succeeded with one class is not a guaranteed success with another.
Finally, anyone who works for an extended period of time as a substitute teacher is astonished at the kind of lesson planning that he sees many teachers doing. Most frequently that planning consists of recording the textbook pages which have been assigned, or which are to be discussed, with no provision regarding goals or means of achieving those goals. These are left up to the adaptive ability of the substitute teacher. This means of course that a substitute teacher must become some sort of combination composer-conductor-escape artist. He must develop the lesson as he leads it, while continually being forced to escape from those carefully laid traps which are regular fare for substitute teachers in most classrooms. The nature of the substitute teacher's work is hardly conducive to longevity, but teachers can provide significant aid if they will.

Teachers who anticipate the possibility of being absent (and this does occur to even the hardiest through such strange maladies as straining one's back in getting out of bed, or contracting some rare tropical disease from work in the biology lab) should plan to provide the substitute teacher with all possible help in the form of lesson plans prepared in advance. The substitute, the class, and the regular teacher all gain from such a provision. And if, by some outside chance, the teacher should find that he has made it to school intact, he may discover the joy of a planned lesson.

**What a Lesson Plan Might Look Like**

It should be emphasized here that the key to the construction of all teaching plans is usefulness. A teacher ought to construct a plan which he can use, even to the extent of carrying it about the classroom with him. This, of course, means that the plan must be concise as well as adaptable.

The teacher should not only make a plan which he can use, he should use a plan which he can make. Since relatively few teachers are eager to spend extended periods of time developing plans, it seems reasonable that they should construct plans which are brief and to the point, which contain those helps they need but contain relatively little extraneous material.

The plan suggested here is no means represents the only form which might be followed. It does represent, in the opinion of this writer, an acceptable minimum. It includes three elements: why we teach, what we teach, and how we teach it.

**Behavioral Objectives:** The lesson plan form, as you see from the example on page 9, includes, first, behavioral objectives. These represent the teacher's expectations for those he teaches as a result of his teaching. It represents the 'why' for teaching a particular lesson.

Behavioral objectives should represent true behavior, in that they are observable and the teacher can by means of his powers as a professional
observer, recognize the extent to which he has succeeded in achieving his objectives. An example might be: "As a result of studying today's topic, the student should be able to give an accurate definition of nationalism," or "When confronted with a problem, the student could be expected to demonstrate an orderly process of problem solving by identifying the problem and collecting information as initial steps in the process." Behavioral objectives represent the beginning step in planning, since if we can foresee no way in which a particular lesson will affect the student, it is extremely difficult to justify teaching it. The only valid reasons for teaching any lesson are the impact which it will have on the student's subsequent behavior. Therefore, behaviors which are expected to result from a lesson should be considered before determining the approach or the precise material which one would propose to cover. The behavioral approach, in fact, should result not in a covering of material, but in an uncovering of ideas and skills of use and value to the student.

It is often helpful to let the student know in advance what will be expected of him in a class. The behavioral objectives for a lesson may well be articulated to the students at the beginning of a lesson in order to give them some perspective on the teacher's expectations.

**Concept Statement:** The second element of the suggested lesson plan form is the concept statement. This represents the very fundamental ideas which the teacher would propose to teach in the span of the lesson plan as it is written. We might define a concept as a concise statement which can be recognized as the general principle regarding a segment of content. It should be phrased in terms appropriate to the students' vocabulary and should be of such magnitude that it could correspond to a statement or observation by the student. These concepts would be relatively narrow and quite specific in their focus. Examples: "Nationalism may be either a cause or an effect of the actions of a government," or "Attempting to resolve a problem, before defining that problem carefully, may result in a false start and confusion."

The concepts outlined here represent the basic 'what' to be taught in the lesson. While these concepts might not necessarily be presented to the class in precisely the form in which they are shown in the teacher's lesson plan, it would be expected that they would closely parallel the student's verbal appraisal of "what we learned today."

The articulation of the general idea(s) which the teacher intends the students to take from his class in the form of a concept statement of the lesson plan has two distinct advantages for the teacher. First, the concept statement on the plan serves as a central focus for the teacher's efforts. With the concept statement continually in front of him as he teaches, the teacher should find it quite natural to direct the class' activity toward these central ideas, although there is little or no value in the teacher's repeating the concept statement at regular intervals himself.
The second advantage to be derived from the inclusion of a concept statement in the lesson plan is related to the statement often made by inexperienced teachers to the effect that he (the teacher) learns far more about his subject during his first year of teaching than the students do. The observation is probably quite correct, because of the need to clearly express many ideas about the subject for the first time. Putting our ideas about a topic into words, such as is done in writing out a concept statement, results in solidifying that idea in the mind. In other words, if you want to pass that final exam, write out all your answers to the questions in advance, but don't bother to take the "cheat sheet" to the test with you because you will already know the answers.

Activities: The next elements of the lesson plan represent the 'how': These would be used by the teacher in approaching the problem of imparting the concepts he has planned to teach to his particular group. The first of these elements would represent activities of the teacher and the class. The teacher might conceivably want to list his activities: discussion, lecture, or whatever; although relatively few teachers need to have this kind of specific statement in order to proceed efficiently. Perhaps a more appropriate entry in the realm of activities would be "seed" questions; those questions which are intended to get the class moving. A seed question should be rather general, with the expectation that its consideration will generate a series of other questions naturally. You have studied about geestion development in the "conversational" element of the "Our Cons."

Another possible entry in the activities section would be examples which the teacher hopes to use in his class activity. These might be problems, sample equations, or sentences having particular characteristics which the teacher will use in his discussion with the class. There are few periods of time longer than the half minute in which you desperately grope for a sample of a sentence with a dangling participle. Additional entries here might regard conduct of the class of which the teacher needs to be reminded. For example, "In group activity be sure that Ann and Sally are not assigned to the same group." Notations of this kind may well help either a teacher who is typically absent-minded, or a substitute who is not well acquainted with the social configuration of the class, to better accomplish what he proposes to do.

The activity area of the lesson plan should probably not include an outline of subject matter, since a common human frailty when presented with such an outline is to hastily enumerate the elements of the outline as they appear, and then wonder what to do next. Only one or two major content points or ideas should be included, as such, in the activity section. It would be infinitely better to include questions which the teacher had planned carefully to lead the students to discover the concept he hoped they would learn.

The Assignment: The item listed fourth in the planning outline is the assignment. This does not necessarily mean that the assignment need come at this
point in the lesson. Neither should it be inferred that every lesson must include an assignment. The nature of the assignment will tend to dictate where it would most appropriately be given to the class. A word of caution here, however: Routine assignments, such as a series of mathematics problems, would probably best be given after the class discussion has been concluded in order to avoid the problem of having some students give their attention to the assignment rather than to class activities. This pre-supposes that the class activities are worthy of the students' attention, of course. Care should be taken to give any assignment early enough during the class period to allow time for clarifying questions. It is usually desirable to allow the class to begin work on an overnight assignment before they leave the classroom. This practice lets the teacher supervise the initial work on the assignment to take care of early problems and see that everyone gets started in the same direction.

Several points must be made with regard to assignments. Although, as a student almost everyone has experienced the frustration of a poor assignment, when we become teachers we persist in committing the same crimes in the assignments we give. Therefore, a few points of utmost importance with regard to assignments:

The assignment must be worthwhile, and the student must understand why it is worthwhile. Many assignments ask the student to repeat a series of similar actions, such as answering textbook questions or doing large numbers of mechanical problems. This kind of assignment is usually difficult to justify. It is particularly difficult to justify when the student does not understand why he is asked to make these repetitions. The assignment of "the next twelve pages in the text" is equally difficult to justify, both to the student and to the informed teacher, since reading these pages with no ultimate purpose or plan will most often result in relatively little benefit. The reading assignment should include questions or particular points of interest to which the student should be alerted. Relatively few textbooks, it should be noted, include questions of quality at the end of the chapter, since these questions cannot be adapted to the interest or ability level of a particular class or the goals of a particular teacher. Perhaps the only assignment which would seem more reprehensible than "read the next twelve pages in the textbook," would be "read the next twelve pages in the textbook and answer the questions at the end of the chapter."

Very real care should be taken by the teacher to make his assignment clearly understood. If the assignment is one of particular significance, such as a term paper assignment, it would be most appropriate to make this assignment in written form to be duplicated and distributed to the class. This written form should include a statement of the assignment and, if necessary, an explanation of it, along with such other details as the date when the assignment is due, the value to be given the assignment in evaluating the student's progress, and such ground rules as format, length, and standards for the evaluation of the assignment.
Students, in junior high school particularly, can benefit from experience in taking dictation from a teacher. However, if an assignment is to be given by dictation, the teacher should plan to allow a significant block of time in which the assignment is to be given and repeat it at least once, since some students will be more adept at taking dictation than others.

In planning an assignment, the teacher should use care that the assignment is appropriate to the class in, for example, the vocabulary of the reading assignment, the intellectual demands that the assignment will make on the class, or the readiness of the class for the material of the assignment. As a rule, only reading assignments will be given in anticipation of class activity. Most other assignments would follow class activity, either in extending that activity by elaboration upon specific points, examination of questions which were raised in class activity, or practicing of skills which have been introduced in the class activity.

Special care should be used in considering the length of reading assignments and the general amount of work assigned. Remember that some students can complete assignments much more quickly than others. This may be the result of greater reading facility, high motivation, or a variety of other factors. A few simple guides are in order on this point: (1) It is better to assign too little than too much homework if you should err in quantity of work given. (2) Length of assignment should be considered or adjusted in order to allow your slower students the prospect of completing the assignment with a reasonable effort. Homework assignments, for example, which require an average student to spend four or five hours a day in order to complete them are totally unreasonable. (3) Never assign more written work than you are ready to read and respond to in a reasonable period of time. Papers which are not returned, returned without comment, or returned after the student has forgotten their existence serve no valid purpose.

Summary Statement: All too few lessons include a summary or concluding statement, and yet it can play a valuable part in the success of the lesson presentation. This is the point at which steps are taken to ensure that the class understands those concepts which have been taught, has grasped the ideas which the teacher had hoped it would, is able to apply the skills which he set out to teach, or where the teacher can see that the class has reached a given cumulative point in consideration of course material. The summary serves to tie the knot at the end of the lesson. It might be given by the teacher or by the class. The lesson plan should include either a statement which might be used as summary, or questions which would elicit a statement in summary from the members of the class.

Evaluation of Lesson: Note that the lesson plan form contains an empty space at the bottom of the sheet labeled “Evaluation of Lesson.” This is the point at which the teacher writes himself a note about the lesson. He may wish to state here those inspirations which come during the lesson presentation or those devices which were used successfully without having been
included in the lesson plan. Such things do occur at times and should cer-
tainly be preserved for reuse. He may wish also, to state an evaluation of
certain elements of the lesson based upon sad experience. An example might
be, "Stay away from the question of nationalism as it relates to political
parties," or the opposite sort of statement might also be made, "Be sure that
the question of nationalism as it relates to political parties is discussed."
This segment of the plan is particularly useful to the teacher after a period of
time has elapsed and he wishes to utilize similar content or activities in
another lesson.

It seems logical to expect that the teacher would be continually evaluating
his lesson throughout its presentation. The inclusion of behavioral objectives
and the identification of the major concepts to be taught provide the teacher
with tools for this evaluation, but he should also evaluate the response of his
class to each aspect of the lesson in order to be most effective.

Generally speaking, the lesson plan serves as the teacher's guide through
the class period. It can also be an aid to him in developing tests or future
lessons, and in situations where he is called upon to teach the same general
content at some later date. Any substitute teacher will add that a good lesson
plan is a welcome ray of hope in an otherwise gloomy assignment.

Unit Planning

The unit method of teaching has grown widely in acceptance as a basic
part of the teaching process over the past quarter of a century. It is an attempt
to systematize the classroom approach to subject matter by dividing it into
meaningful, unified segments. A unit of study may generally be expected to
take anywhere from one to five weeks of class time.

We have seen in the past few years a great number of developments in
the area of unit planning by outside sources. An excellent example of this is
the plans developed by the High School Geography Project, which include
substantial amounts of material to be used by the teacher in approaching
certain topical areas. Material of this kind, prepared by the most able
scholars in the field, with time and resources at hand to provide for quality
preparation of units, can be a valuable device for improving instruction and
relieving the teacher's planning load. However, the need for the teacher to
plan general course direction even when these prepared units are used, and to
adapt them to specific class situations, still requires some long range planning
on his part. It is also unlikely that every topic in every subject can ever be
developed into a unit which will be acceptable to every teacher. Therefore,
the need for the organization of materials into large, conceptually-related
(unit size) segments still must be met by the conscientious teacher, even though
the dimensions of the problem are being reduced. The discussion of unit plan-
ing which follows has application both in situations where the teacher is adapting
prepared materials and where he is developing an original unit.
LESSON PLAN

DATE(S): Three day lesson from the unit on communication devices.

BEHAVIORAL OBJECTIVES: After this lesson the students should be able to identify symbols from examples in films, printed materials, and their own communication, and explain why they are used.

CONCEPT STATEMENT:
Symbolism is used to convey universal ideas or emotions in many forms. Symbolism expresses the author's idea with more impact than if he simply stated his message. We use symbolism in gestures and tone of voice as well as in many common expressions.

ACTIVITIES:
(Remember to get overhead projector)
Projection of Mauldin cartoon.
"Why Lincoln rather than, say, Calvin Coolidge?"
"What do you think Lincoln 'stands for' in this cartoon?"
"Do you ever make use of symbols to communicate your ideas?"
"Why does the author use the symbols he does in "The Scarlet Ibis?"
"Why do you suppose James Hurst picked the three sentences given on page 95 as keys to the story's meaning?"

ASSIGNMENT: Give first day of lesson.
"List examples of familiar symbols in your daily lives."
Example: barber pole, highway signs
Read "The Scarlet Ibis," pp. 87-95.
Watch for answer to these questions:
1. What symbols appear in the story?
2. What purpose do they serve?
3. Is the story any better as a result of the symbols used?
Discussion the third day of lesson.

SUMMARY STATEMENT:
"What are two characteristics that a symbol must have in order to be effective?"
"How could we use symbols to improve our own communication?"

COMMENTS OR EVALUATION OR LESSON:
Unit planning should, like lesson planning, be oriented to usability. It seems illogical to ask teachers to construct unit plans which are of no real value to them once they are written, or to prepare units in such detail that the teacher is too exhausted to use them by the time they are written. The main uses of the unit plan are in advance procurement and preparation of materials used in the unit, and as a general guide from which a continuity of lesson plans may be developed. Notice that the sample lesson plan on page 9 is drawn from the sample unit outline on page 12. The unit plan is also a valuable aid in the teacher's evaluation of class performance over an extended period of time, because it includes long range goals.

The expenditure of the teacher's energy in unit planning should not be overlooked here, since a teacher may use a dozen or more units for each class in the course of a year. The desirability of having highly detailed units which include large numbers of references and sources and detailed class activities is indisputable, but the time and energy a teacher who is busy teaching his classes has to expend in such planning is decidedly limited. Therefore, the usefulness of a unit plan must, at least in part, be judged by what its preparation takes out of the teacher. A suggestion then would be that a unit plan might very well be constructed in very brief form, following the same general headings as those outlined for the lesson plan. The behavioral objectives and the concept statement would of course be much broader and more general, since they would be accomplished over a period of weeks rather than in a period of a few days. This could be viewed as a unit outline to be completed in greater detail as time and study allow, and as use of the unit suggests.

Unit planning then would represent a process something like this: The teacher identified a significant segment of content into which he can build experiences leading to certain desirable behavioral outcomes. This content might be topical, as in a history unit on the Civil War; or it might be thematic, as in an English unit on "man's inhumanity to man." It might be sequential, as in the development of the necessary skill in working with signed numbers before a student can begin to do factoring problems.

It is possible to use the same form for the unit outline and the lesson plan with only minor modifications. Under the heading of activities, the unit planner might well want to include basic activities which would be pursued, or suggestions of class activities which would be of a long-term nature. Significant under this heading would be the inclusion of a list of materials which the teacher would propose to use in the unit, since it is necessary to plan these materials well in advance in order for them to be available at the time when they are to be used. Such materials as films, handouts, and materials which must be developed or obtained in advance before they can be used must be listed as a part of the unit outline. The assignments to be listed here would be only those assignments which would be of an extensive nature, as for example, the assignment of term papers or continuing group activities.

Under the heading of summary on the unit outline should be listed any culminating activity of the unit. Attention should be paid here, too, to the evaluative
processes to be used in judging student achievement throughout the unit. The value to be given each assignment or activity toward the grade might well be listed in this section. This combined with the behavioral objectives for the unit enables the teacher to clearly outline his expectations to the class at the beginning of the unit if he wishes. Most conscientious students will agree that they find this approach unique but refreshing.

The unit outline fits well into the analogy of the lesson plan as a map if the unit outline is seen as a general plan for a long trip listing the main points of interest to be visited and the general outline of travel. The lesson plan, then, becomes the more specific map of one segment of the same trip. These two aids are a valuable guide in helping the teacher through his classroom odyssey.
DATE(S): Four week unit on Communication devices (9th Grade).

BEHAVIORAL OBJECTIVES: When asked to choose among several written selections the student should be able to identify the one using the greatest style and clarity of language. The student's written work should show increased use of figurative language and stylistic devices.

CONCEPT STATEMENT: The use of stylistic devices, including figurative language, adds variety to communication and allows the writer or speaker much wider range in expressing complex ideas or feelings.

ACTIVITIES:

Lessons on:
- Symbolism - 3 days; figurative language - 4 days; figurative literary forms - 5 days; communication style - 5 days; review and testing - 3 days.

Materials:
- Overlay of Mauldin cartoon - overhead projector
- Handout sheets on common symbols and figures of speech
- Collection of "mood" pictures
- Film: "Symbolism in Literature" Sigma Education Films (color - 14 minutes)
- Records: "Mark Twain - Episodes from Tom Sawyer" Caedmon
- Recordings: "Fables from Aesop" Spoken Arts Recordings
- Selections: Green, Essays for Modern Youth, New York, Globe Book Co. 1960

ASSIGNMENT:
- Teams of three will write a parable, allegory, or morality play on some modern theme of their choice. Best read to class.
- Each student will write a personal essay or editorial on a school, community, or state issue, or on some contemporary teenage problem.

SUMMARY STATEMENT:
- Culmination will include bulletin board display of mood pictures with selection titles given by class (up for last 5-8 days of unit), and presentation of selected student writings by groups or authors.

COMMENTS OR EVALUATION OF LESSON:
- Values of unit activities:
  - Group production weight of 1
  - Essay or editorial weight of 2
  - Unit test weight of 2
  - Two graded homework assignments total weight of 1
LESSON PLAN
CRITIQUE SHEET

Name of Peer Teacher

DATE(S):
Is content appropriate to stated duration of lesson? ( ) ( )

BEHAVIORAL OBJECTIVES:
Stated in behavioral terms? ( ) ( )
Appropriate behavioral expectation? ( ) ( )
Evident in lesson presentation? ( ) ( )

CONCEPT STATEMENT:
General central ideas which the student can "take" home and use? ( ) ( )
Evident in lesson presentation? ( ) ( )

ACTIVITIES: (May include text reference, questions, examples, as well as general outline of activity)
Related to behavioral objectives and materials which can be directly used in lesson presentation? ( ) ( )
Appropriate for class level? ( ) ( )
Provided concreteness? ( ) ( )
Included higher order questions? ( ) ( )
Included useable examples where appropriate? ( ) ( )

ASSIGNMENT:
Imaginative or interest stimulating? ( ) ( )
Clearly stated, including date due, nature of expectation? ( ) ( )
Study aids provided (e.g., questions, sample problems, 'starters'? ( ) ( )

SUMMARY STATEMENT:
Related to behavioral objectives and concept? ( ) ( )
Served to reinforce lesson material or stimulate work toward assignment? ( ) ( )

COMMENTS OR EVALUATION OF LESSON:
General effectiveness of lesson plan? ( ) ( )
General effectiveness of presentation? ( ) ( )

COMMENTS OR SUGGESTIONS:
NEPTE - RISDC

REFERENCE SYSTEM DESIGNATION: 400.08.3

PROGRAM: MT. PLEASANT HIGH SCHOOL/PRACTICUM

COMPONENT: TEACHER PREPARATION PHASE

MODULE CLUSTER: TEACHER SKILLS

MODULE: SIMULATION

DEVELOPER: PETER PICCILLO

DATE: FEBRUARY 1973

FIELD TESTED BY: P. PICCILLO & M. STONE, SPRING 1973

REVISED BY: P. PICCILLO & M. STONE, JUNE 1973
NOTE:

It is recommended that two or more students do this module concurrently.

Rationale:

The use of games in the classroom is an important teaching technique. By allowing students to grapple with close approximations of real situations, games provide an interesting application of learned ideas and information. Perhaps just as importantly - games can be fun - a welcome change from normal school routines.

Objectives:

When you have completed this module, you will be able to:

1. Demonstrate an understanding of the uses and functions of simulation games.

2. Select and/or develop simulation games to achieve specific instructional goals.

3. Demonstrate your competence in the technique of simulation games.

4. Demonstrate an understanding of the major component parts of simulation games and their functions.

5. Introduce, give directions, demonstrate, and use simulation games in a classroom setting.

Materials Needed:

William A. Nesbitt, Simulation Games for the Social Studies Classroom, (Foreign Policy Association, 1971).

Access to: 1) College Library  
            2) Curriculum Resource Center

Activities:

(all are required)

1. List and describe briefly 5 of the 10 games discussed in chapter 2 of Nesbitt.

2. Choose three (3) simulation games held in the Curriculum Resource Center and describe them. Tell which learning objectives could be achieved through their use, and how they might be accomplished.

Enrichment activity
Activities (continued):

3. Drawing on your reading of ch. 3 of Nesbitt, (as well as other sources) write a rationale dealing with the positive aspects of simulation games. Include a consideration of the various major criticisms which have been leveled against simulation games, and justify their uses in the classroom by providing arguments in answer to criticisms.

4. Compile a list of 8 simulation games held at the Curriculum Resource Center which in your opinion could possibly be useful in a social studies classroom in grades 7 - 12. Use the evaluation sheets provided for this purpose, and classify them according to learning objectives. Include anecdotal evaluations of at least three (3) of the games.

5. Read the appended information on simulation games. Confer with your Practicum instructor and arrange for observation of use of simulation games in a classroom, and/or ask for a seminar on gaming.

6. Select a set of learning objectives to be taught in game format. Select (or develop) a simulation game capable of achieving your learning objectives. Master the game and make any alterations necessary for its application to your classroom. At this point - confer again with your Practicum instructor for scheduling.

7. Explain, introduce, organize -- teach the ideas, concepts, information contained in your learning objectives using the simulation techniques you have selected/developed.

8. Schedule an evaluation conference with your Practicum instructor and/or cooperating teacher.

(Optional) Design, build, and implement your own simulation game.
EVALUATION OF SIMULATION LESSONS

1. Confer with your Practicum instructor and agree upon acceptable criteria of pupil growth expected.

2. Prepare a written report of the simulation game. Include the following points:
   
   a) Objectives (behavioral)
   
   b) Statement of concepts, ideas, data to be learned.
   
   c) Pre-assessment activities.
   
   d) Learning activities. Describe the game and tell what happened as it was played.
   
   e) How did you evaluate your pupils? Include documentation.
   
   f) All did it go? How and why would you change it were you to do it again?
CHECK LIST
FOR EVALUATING INSTRUCTIONAL GAMES

1. Is it the object of this game to promote learning of an important technique, or to enrich or reinforce specific knowledge or skills?

2. Does the game accomplish its stated goal?

3. Is it appropriate to the interest, ability and achievement levels of the students involved?

4. Are the learnings involved worth the time it takes to play the game?

5. Is skill, not luck, the criteria for winning?

6. Is it fun to play?

7. Can the game's directions, whether written or oral, be easily understood and followed by the children who will be playing the game?

8. Do all players actively participate in the playing of this game?

9. Are time requirements to complete this game reasonable in terms of the children who will be playing it and their class schedules?

10. Can the game be played within the physical confines of the available space?

11. Can the game be played without extensive pre-play preparations?

12. Can the game be played without direct teacher supervision?

13. Are the materials necessary to play this game available or easily purchased at a reasonable price?

14. If there are "winners" and "losers", will both winners and losers learn by playing this game?
EVALUATION OF INSTRUCTIONAL GAMES

Directions: Use with "Check List for Evaluating Instructional Games"

Name of Game:

Description:

Purpose:

To be played by:

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 
11. 
12. 
13. 
14.
CHECK LISTS FOR EVALUATING AN INSTRUCTION GAME PRESENTATION

**Part A: Teaching Procedures**

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<tbody>
<tr>
<td>1. Did trainee introduce the game in a manner that encouraged participation?</td>
<td>Yes</td>
<td>No</td>
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<td>2. Did trainee make participation optional, with alternative activities available for those not wishing to play?</td>
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<td>3. Did trainee explain the purpose of the game?</td>
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<td>4. Was trainee clear in his directions and explanations of game rules?</td>
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<td>5. Did trainee provide adequate space and a suitable area for playing the game?</td>
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<td>6. Did trainee provide an opportunity for students to ask questions?</td>
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<td>7. Did trainee have all of the game materials he needed and were they distributed quickly and easily?</td>
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<td>8. Did trainee provide positive reinforcement to the players during the playing of the game?</td>
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<td>9. Did trainee allow for sufficient time to complete the game?</td>
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<td>10. Did trainee display a positive attitude toward the game's &quot;losers&quot; as well as the &quot;winners&quot;?</td>
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**Part B: Student Behavior**

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<tbody>
<tr>
<td>1. Did students volunteer to play the game?</td>
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<td>2. Did students listen carefully to directions?</td>
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<td>3. Did students follow the directions without difficulty?</td>
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<tr>
<td>4. Were all players actively involved in the game?</td>
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<td>5. Did students display enjoyment in the playing of the game?</td>
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<tr>
<td>6. Did students maintain their interest throughout the entire game?</td>
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<tr>
<td>7. Did students complete the game?</td>
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<tr>
<td>8. Did the attitude of the game's &quot;losers&quot; reflect a willingness to play again?</td>
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Games Simulating Political Processes

All students in the class form a legislative body.

On the basis of individual choice, determined by a questionnaire, students are organized into two parties. Each party is further divided into two factions, mavericks and loyalists.

Each party meets to select its leadership. The majority party selects the leadership for the legislature itself.

The class is organized into 2 - 4 substantive legislative committees. The teacher selects the committee chairman from the majority party.

Committees do research and debate the drafting of a piece of model legislation in an area of interest. At a specified time, each committee must report its legislation to the floor.

The teacher assigns each piece of legislation a "rule", limiting debate and amendments. She consults with the chairman of the committee in making this decision but does not always follow his advice.

The teacher assigns each member of the class a number of "commitment cards" for each piece of legislation. The questionnaire is used to help her make this decision. Also, she distributes the cards to correct vast discrepancies of power within the legislature. The number of cards given to each player is known only to the player, although a player may reveal this information as he sees fit.

In order to vote, a player must have at least one card. A player with no card, is not allowed to vote but he may participate in the game in other ways.

Players may lose cards in the following manner.

1. The teacher will circulate, from time-to-time, letters from constituents. Some of these letters will constitute "pressure" on the legislator and he will be asked to surrender one or more cards on a particular issue.

2. Key members of the legislative body will be given "power cards". If a student is presented with a power card, he must surrender one commitment card.

In an environment allowing for free movement, the students debate, amend and pass on the legislation which has been developed.
Games Developing Inquiry Skills Related to Specific Social Sciences Disciplines

Students are given a package of data about any historical, political or social event. They play the role of a social scientist trying to make an informed judgment about the nature of social reality based on the data revealed. For example:

Students are divided into small groups. Each group is given a site map of an abandoned camp of a neolithic people.

The map comes with a set of pictures or samples of artifacts found in the camp. The map shows the location and the distribution of these items.

Students play the role of anthropologists making inferences about the nature of society.

The teacher provides a structure of specific questions which need to be answered by the students within the time limits of the game.

Games Developing Information-Gathering Skills

Students select individual members of Congress—preferably members serving on a single committee of interest to the class.

Using the Congressional Quarterly Almanac and other sources of public information, the student researches the background and political situation of the Congressman he has selected.

The teacher presents the students with a policy-making problem likely to come before the committee. The students do some research on the problem.

Students debate and resolve the problem within the structure of the committee adhering, in their best judgment, to the motives and patterns of behavior of the congressman they have studied.
Games Simulating Market Mechanisms

Each student in a large or small group is told to play the role of a small farmer who must decide to make a series of investment decisions about the use of his resources to plant crops. Each farmer has a ten acre farm. He may plant all or part of his farm with any combination of the following crops:

Rice
Tobacco
Cotton

He may also decide to leave his land idle.

At the end of each planting, a player must have a certain amount of money for subsistence. If he fails to achieve this amount, he loses his land. A player may borrow money from any other player to prevent this from happening. Any terms may be given for such a loan that can be realized in bargaining. The teacher will act to enforce any agreement that is reached.

Players are given no information about the history of the market.

In each round of the game, the teacher responds to the investment decisions by posting a "market price" for each commodity.

Students compute statements of profit or loss in each round of the game and make decisions for the next round.

The teacher can manipulate the prices of the products in the market to focus on different economic processes. For example, he can make one or more products "high risk/high gain" investment items. Other products can be relatively safe investments with low returns. The teacher can structure the system so that a great deal of inequality develops. The teacher can build an "international depression" into the system.

The teacher announces the end of the game at an unspecified moment.
Games Simulating the Interaction of Man and His Social and Environment

Students are given a map of a real or fictitious city or urban region. Students are given an inventory of problems which must be solved or decisions which must be made with respect to this city. Students play the roles of leaders with clearly defined constituencies. They are given (or develop through research) the essential background of their group. They are given a set of goals for their group which may or may not be in conflict with the requirements of the city.

Students are given access to a number of institutions which have the power to make decisions influencing the region and the individual group. Access does not have to be equally distributed among the groups.

The rules for the making of decisions within the institutions must be clearly specified.

The groups work to solve the problems of the region without damaging the interests of their group.