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A method for developing the teaching skills of post-secondary teachers.

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A METHOD FOR DEVELOPING
THE TEACHING SKILLS OF POST-SECONDARY TEACHERS

A Dissertation Presented

By

DANIEL PATRICK MCCARTHY

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

MAY 1978

Education



Daniel Patrick McCarthy

1978

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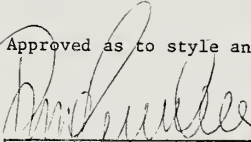
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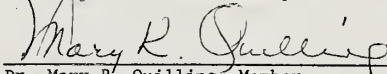
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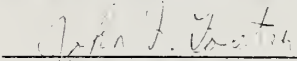
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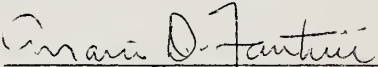
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FOR KRISTEN

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I would like to speak for innumerable students who were able to flourish in the dynamic, exciting environment created at the School of Education by Dwight Allen. I feel extremely fortunate to have been at the right place at the right time.

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Most importantly, I would like to thank Barbara Howard for typing and editing this manuscript, helping me on the project, tolerating my changing moods, and especially for loving me. I could not have completed this study without her.

Abstract

A Method for Developing the
Teaching Skills of Post-Secondary
Teachers

May, 1978

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The purpose of this study was to produce and test a prototype self-instructional teaching skill development system. The general question was whether or not the method of production was effective for this type of material. The specific question studied concerned the use of the system by post-secondary teachers. First, was the system effective for developing a teaching skill? And second, were the teachers who used the system satisfied with it as a means of developing a skill?

A three-phase approach was employed in the production of a self-instructional system for the skill, Facilitating Student Participation. Phase One, Substantive Development, included conceptualization and analysis of the skill, and preliminary

development of system components. Phase Two, Component Development, included component and system development. Phase Three, Pilot Test, included the testing of the system under specified conditions.

Data gathered in Phases One and Two were exclusively formative, while Pilot Test data addressed the effectiveness of the system and user satisfaction with it.

Data gathered during the four-week Pilot Test with eight post-secondary teachers indicated that, while there was little skill development observed, participants were somewhat satisfied with the system as a means of skill development. Several participants indicated that more development would have been observed in a longer test. Six of eight indicated that they would use similar systems for other skills.

The method was seen as effective in producing a prototype skill development system. However, changes in instrumentation in the Pilot Test are indicated.

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C H A P T E R I

INTRODUCTION

Instructional Development In Higher Education

During the last several years, instructional development programs have proliferated on college and university campuses. Several factors contribute to the need for the existence of these programs and for the production of easily accessible instructional development materials.

One of the more critical factors is the lack of teaching preparation of those who typically teach in post-secondary institutions. It is indeed ironic that graduate programs which prepare students for post-secondary faculty positions typically neglect teaching in that preparation (Riechmann, 1974; Popham, 1974; Rothwell, 1969).

Several pervasive attitudes among faculty communicated to and often modeled by graduate students contribute to the lack of preparation for teaching (Riechmann, 1974; Fafunwa, 1974; Whitfield and Brammer, 1973; Rothwell, 1969). One of these attitudes is that teaching is not a very important aspect of a faculty member's professional status. A closely related factor is the focus of graduate programs and of faculty energies on research. Another notion that contributes to the neglect of teaching is that knowledge of subject matter is sufficient to teach that subject matter. These ideas are used as rationale for the neglect of teaching preparation in higher education.

While instructional development programs have been initiated to help faculty in improving their teaching, the cost of these services which often involve one-to-one consultation, is rather high, and various other economic conditions have forced the costs involved in higher education to rise (Gould, 1974; Wood, 1974). The existing instructional development services require resources of people, equipment, and materials that become more precious as time passes; and the reality of current budgets is such that services are being curtailed on many campuses. Due to the state of the economy cost effectiveness is an increasingly important factor in higher education in general, and instructional development services in particular (Smith, 1974).

It is clear that the state and other public funding sources do not have the money to meet rising costs. This decrease in available institutional funds has put a greater demand on private funding agencies. They are being deluged with worthwhile proposals, only a small portion of which can be funded (Smith, 1974; Allen, 1974; Whitfield and Brammer, 1973). Unfortunately, this "money crunch" has come at a time where, due to entrenchment, there is an increase in the number of those interested in availing themselves of instructional development services.

A factor complicating the provision of service is the fact that, even with philosophical and monetary commitments to instructional development, time constraints on involved faculty and Teaching Assistants (TAs) are considerable (Allen, 1974; Whitfield and Brammer, 1973). The workloads of faculty involved in research and service, and TAs involved in graduate programs,

leave little time to devote to improving their teaching. Instructional development services such as the systematic teaching improvement process developed at the Clinic to Improve University Teaching at the University of Massachusetts at Amherst, while found to be successful (Erickson and Sheehan, 1975), demand time that is often not available.

In short, there is a growing need for well-developed and tested materials that are inexpensive and concise; materials that would create alternatives to and supplement existing programs for the improvement of post-secondary teaching.

Teaching Skill Development

The primary purpose of the study was to produce and test a booklet which provides materials for developing skills for facilitating student participation in the classroom, a teaching skill commonly used by post-secondary teachers. The secondary purpose was to test the format of the booklet, so as to provide information critical to the production of booklets addressing other skills.

The booklet includes information about some of the important aspects of student participation in classroom activities, exercises including feedback procedures and strategies for developing skills, and procedures for evaluating those skills. The focus of the booklet is on practicing the skills with feedback on that practice. This approach has been found to be particularly effective for developing and improving skills in micro-teaching (Allen and

Ryan, 1969) and the teaching improvement process developed by the Clinic to Improve University Teaching (Clinic) at the University of Massachusetts at Amherst, both of which will be discussed in Chapter II.

The general question was whether or not the method is effective for producing this type of material. The specific questions to be studied concerned the use of the booklet by post-secondary teachers. First, is the booklet effective for developing a teaching skill at the post-secondary level? And second, are the teachers who use the booklet satisfied with it as a means of developing a skill?

Production and Evaluation Process

The study was undertaken using a three stage process for the production and evaluation of a booklet to be used by post-secondary instructors to develop their skills in facilitating student participation. The first stage involved Substantive Development of the booklet, the second dealt with Component Development, and the third with Pilot Testing the booklet. There were elements of both production and evaluation in each of the first two stages of the process, the third stage dealt primarily with evaluating the booklet.

The goal of the Substantive Development stage of the process was to develop the booklet so that the content and approach were acceptable to several teaching skill development experts. The thrust of evaluation was formative to gather as much input on

the booklet as possible.

The Component Development stage of the process was aimed at developing the components of the booklet so that they were acceptable to potential users of the booklet. The thrust of evaluation at this second stage was also formative but sought reactions to the booklet's parts.

The aim of the Pilot Testing stage of the process was to determine the effectiveness of use of the booklet in developing skills and its acceptability to its users. The emphasis of the evaluation at this stage is primarily summative, but could be used in further development of the booklet.

Figure 1 indicates the major activities of each stage of the process. Figure 2 shows the process milestones during each stage. The comprehensive flow chart (Figure 3) incorporates the activities and the milestones to show the entire Production and Evaluation Process in great detail. The intent of the flow chart is to show the complexities and parallels of the system rather than to indicate exact time sequences in which production and evaluation should occur.

Each line on the chart represents a process activity. The activities lead to events, represented by circles, which signify the completion of activities on the intersection and interaction of parallel activities. The squares represent milestones which are the major events or accomplishments in the process.

System Production	Substantive Development	Component Development	Pilot Test
Conceptualization Analysis of Skill Preliminary System Development	Component Development System Development	Design Techniques Distribute Materials Conduct Testing Compile Data	Distribute Materials Conduct Test Compile Data
Design Evaluation Prepare Materials	Design Techniques Distribute Materials Conduct Testing Compile Data	Design Techniques Distribute Materials Conduct Testing Compile Data	Distribute Materials Conduct Test Compile Data
Feedback and Evaluation	Design Techniques Distribute Materials Conduct Testing Compile Data	Design Techniques Distribute Materials Conduct Testing Compile Data	Distribute Materials Conduct Test Compile Data

Figure 1

Production and Evaluation Activities

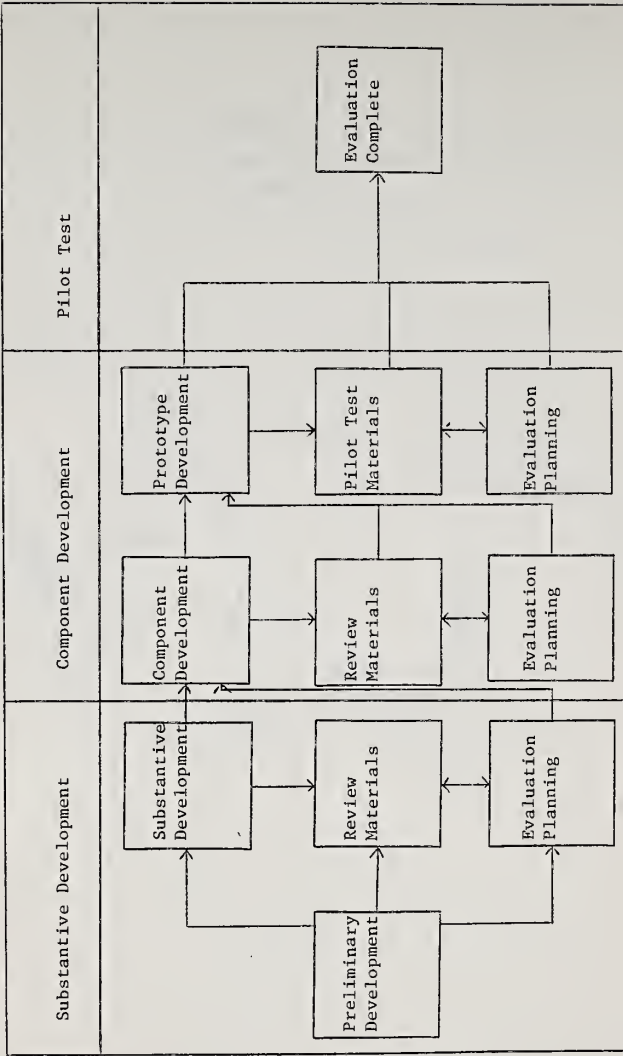


Figure 2
Production and Evaluation Milestones

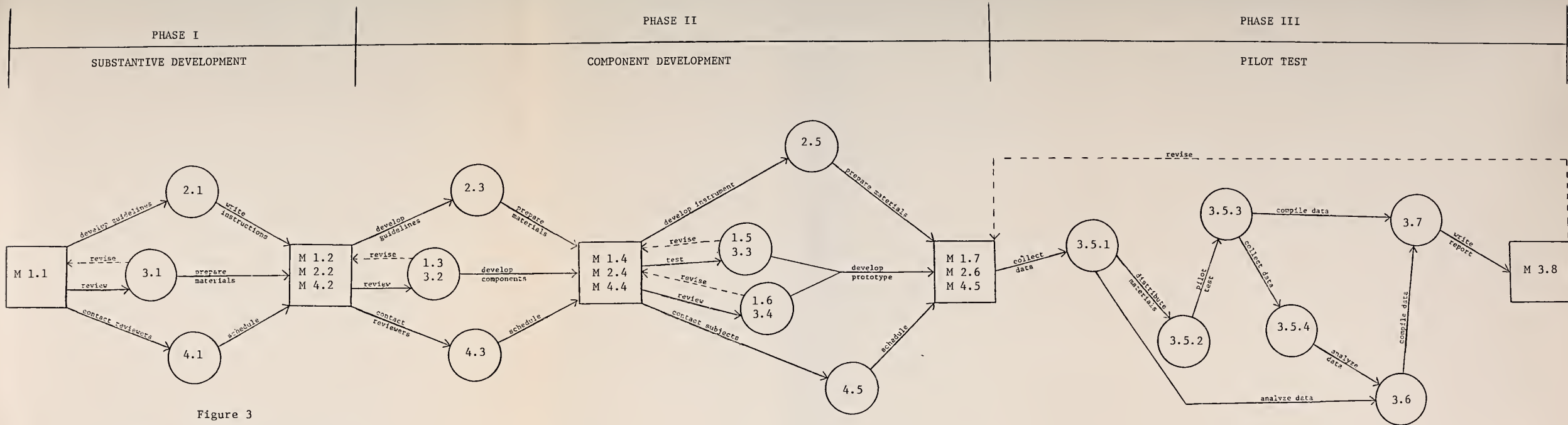


Figure 3

Chart of Interrelationships in Booklet Production

Nomenclature

Milestones - The milestones are the important events in this process. They are represented by squares on this chart. The notations within the squares represent: M = milestone event.

Events - The events are of lesser importance than milestones and represent the start or completion of an activity. They are denoted by circles.

Activities - The activities are the procedures of this process. They are shown as labeled lines on the chart. The broken lines indicate an iteration that may be omitted if the product is ready for the next step.

Events and Milestones

Booklet Development - 1		Evaluation - 3(continued)	
M 1.1	Conceptualization and Analysis complete	3.3	Component Review complete
M 1.2	Substantive Development complete	3.4	Component Testing complete
1.3	Substantive Review complete	3.5.1	Pre-test data complete
M 1.4	Component Development complete	3.5.2	Pilot Test begins
1.5	Component Review complete	3.5.3	Pilot Test ends
1.6	Exercise Testing complete	3.5.4	Post-test data complete
M 1.7	Prototype Development complete	3.6	Pre & post test data analysis complete
		3.7	Pilot Test data complete
		M 3.8	Evaluation report complete
Feedback Instrumentation - 2		Planning and Scheduling - 4	
2.1	Substantive Review guidelines complete	4.1	Substantive reviewers scheduled
M 2.2	Substantive Review materials complete	M 4.2	Arrangements for Substantive Review complete
2.3	Component Review guidelines complete	4.3	Component reviewers scheduled
M 2.4	Component Review materials complete	M 4.4	Arrangements for Component Review complete
2.5	Pilot Test instruments complete	4.5	Subjects for Pilot Test scheduled
M 2.6	Pilot Test materials complete	M 4.6	Arrangements for Pilot Test complete
Evaluation - 3			
3.1	Review of preliminary research complete		
3.2	Substantive Review complete		

C H A P T E R I I
THE PRODUCTION OF A TEACHING SKILL
DEVELOPMENT SYSTEM FOR HIGHER EDUCATION

The statement that teachers in institutions of higher education could better develop their teaching skills raises little dispute. The more difficult question facing both faculty and those involved in faculty development is how this can be done more effectively and efficiently. It is indeed a complex question, dealing with approach, motivation, rewards, resources, and priorities. This study attempts to address questions of technique.

The study focuses on an approach to the production of self-instructional teaching skill development systems as one answer to the question of how to develop skills. The skill of Facilitating Student Participation serves as the topic of a prototype system produced using this approach. Conceptualization and analysis of the skill are included here, while later steps of production are described in Chapter III.

The author's experience of four years as a Teaching Improvement Specialist at the Clinic to Improve University Teaching at the University of Massachusetts at Amherst is a major source in the development of system materials. The Teaching Improvement Process employed is described later in this section. While the experience is not systematically documented, it is particularly appropriate to the topic at hand.

An Approach to the Production of Self-Instructional
Teaching Skill Development Systems for Higher Education

Conceptual considerations of teaching skill development. The view of teaching adopted here is the component skills approach (Allen, 1969) which has been of value as a means of teacher training in pre-service and in-service applications (Aubertine, cited in Allen & Ryan, 1969; Perlberg, 1968; Erickson & Sheehan, 1974). This approach has also been valuable in the formative evaluation of teaching, where improvement is the purpose of evaluation (Melnik, 1972). However, when viewing teaching in this way, it is of primary importance to recognize that the skills are extremely interdependent in the practice of teaching.

A teaching skill is defined here as the expert, rapid, and accurate performance (Posner & Keele, 1973) by an instructor of behaviors designed to initiate, activate, and support learning in the student (Gagne, 1975). This definition assumes a somewhat traditional view of teacher-learner interaction that is evident in most institutions of higher learning. It also assumes that skilled teaching is not accidental and is, in fact, clearly intentional and goal oriented.

Development of teaching skills. Two methods based on component skills and focusing on their development are microteaching, developed at Stanford University, and the teaching improvement process developed at the Clinic to Improve University Teaching at the University of Massachusetts at Amherst.

"Microteaching, as originally developed, focuses on providing prospective teachers with teaching practice before they actually begin teaching assignments in schools. Often, microteaching takes place in a laboratory setting where a teacher gives a short lesson (usually lasting from 5-20 minutes) to a class of from three to six students. Typically, each lesson is used for the practice of a pre-determined teaching skill (for example, lecturing, questioning, discussing, or using instructional aids). Each lesson is videotaped and the trainee hears and sees himself immediately after the lesson. A supervisor, who attends the lesson, then analyzes the performance with the teacher, utilizing both the videotape recording of the lesson and written feedback provided by the students. Armed with this immediate feedback and suggestions for improvement, the teacher then reteaches the same lesson to a different group of students. The teacher then has the opportunity to view the results of this lesson."

Miltz, 1975

The Clinic Process, as it is known, involves the design, implementation and evaluation based upon multiple data sources, of teaching improvement strategies that typically focus on teaching skills. The process generally spans one semester and focuses on one course. The instructor is supervised in this process by a Teaching Improvement Specialist (TIS) who is responsible for data collection, including a student questionnaire, instructor interview and self-assessment, videotape recording of a class session, and TIS observation of teaching; analysis, typically organized around the Teaching Analysis By Students (TABS, Appendix A) which provides formative data about twenty teaching skills (Appendix B); and the design, and evaluation of improvement strategies which are often designed to develop skills found to be in need of improvement. Microteaching is often used as an improvement strategy in the Clinic Process.

Teaching skill development in both methods has characteristics

similar to those described by Posner and Keele (1973) in their development of a general theory of skill. Their view of skill learning is that first, a template, a mental model, is established and once developed actions are taken and feedback is compared to the model. Adjustments are made until the correct pattern is established. In both microteaching and the Clinic Process, the supervisor aids in the development of the model through discussion and provision of printed material, often initiates action, and provides feedback.

Skill development in both methods depends largely on the skill of the supervisor. This aspect has both favorable and unfavorable aspects in the context of in-service applications in post-secondary education.

Production of self-instructional systems for teaching skill development.

A self-instructional system for skill development appears to have considerable potential for use by instructors in post-secondary institutions. A learning system incorporating the previously discussed characteristics of skill development in a self-contained package of materials would provide a valuable resource to both faculty and faculty development agencies.

A self-instructional system would be individual in nature and emphasize learning goals, active participation, feedback, and individual pacing. This type of system would be designed to provide for continuous feedback, adapt to situational differences, provide for specific steps to be taken, and provide options for formative evaluation (Goldschmidt & Goldschmidt, 1973).

The materials produced would be the result of development-based research which deals with developing substantive and procedural outputs designed to reach specific objectives and testing how well it reaches its objectives (Klausmeier, 1968). The method of production examined is the procedural output and the prototype system being the substantive output of this development-based study.

Goals of production. The production of a self-instructional teaching skill development system focuses on two general goals. First, the system must be appropriate and effective for post-secondary teachers. And second, it must be appealing to and produce results that are satisfactory to the instructors who use the materials.

These goals, obviously, have significant implications for the testing of the system and for reporting results. A manual including significant production data would accompany the system (Tyler & Klein, 1967). Chapter Three of this study contains much of the information to be included in that technical manual. However, the manual itself is not included.

Definition of terms. Several terms used in this discussion are critical to the understanding of this study.

The term production includes those activities involved with research, development, and testing of a learning system for a particular teaching skill.

Skill development refers to processes by which expert, rapid and accurate performance evolves in the learner. The study deals

with one such process that involves the establishment of a model, and actions approximating the model modified through the comparison of feedback information to the model (Posner & Keele, 1973).

A learning system is defined by Davis, Alexander, and Yelon (1974) as "... an organized combination of people, materials, facilities, equipment, and procedures which interact to achieve a goal." With the two essential characteristics of a system being that it is a planned and interdependent arrangement of its component elements.

Models for skills. The establishment of models of teaching skills is critical to this approach to skill development. It also broaches the controversy over just what is good teaching. But rather than to attempt to define good teaching, the issue here is effective teaching and concerns the development of the skills necessary to accomplish the goals of instruction.

A model for a skill must be established internally (Posner & Keele, 1974) in each instructor using the system and based upon the goals of instruction and other situational factors.

Steps in the production of a skill development system. The method employed in producing these instructional systems has six general steps. They are: 1) conceptualization of the skill, 2) analysis of the components or aspects of the skill, 3) preparation of development system components, 4) testing and revision of components, 5) testing and revision of the system, 6) dissemination and continued revision of the system.

Conceptualization of the skill. Conceptualization of teaching skills presents a somewhat unique problem in relation to instructional design. Typically, this design involves the preparation of behavioral objectives (Davis, Alexander & Davis, 1974; Romberg, 1968; Gow & Yeager, 1975), observable learner outcomes. But in this approach to teaching skill development, the behavior of students has major importance. The conceptualization of a skill is therefore considered in terms of student outcomes of the effective practice of that skill. These statements give direction to the development of evaluation procedures (Romberg, 1968). In addition, the skill is defined as exclusively as possible so as to maximize the focus of the learning system.

Analysis of skill components. In recognition of the complex nature of teaching skills, analysis of components involves the description of the factors making up the skill as it has been conceptualized. The question to be answered in this analysis is what does an instructor do in order to achieve the outcomes discussed in the conceptualization of the skill.

Preparation of system components. The next step of production is the preparation of the components of the skill development system. The components are those instructional materials and activities whose goals are to establish a skill model; to initiate actions that approximate the model; and, to provide feedback about skill related activities.

Specifications, describing desired outcomes, activities, instructions for use, and evaluation procedures (Schultz, 1968),

for the components of the system operationalize the conceptualization and analysis of the skill.

Testing and revision of components. Each component should be reviewed and tested in order to insure that it is appropriate and that it accomplishes its goals. Revision of components is based upon the review and testing and employs the use of feedback loops (Southwest Educational Development Laboratory, 1969).

A component having satisfactory results of a review or test moves to the next stage of development. If the results are unsatisfactory, revisions are made and the review or test is repeated until satisfactory results are obtained. This process is also known as an iterative loop (Schutz, 1968).

Review should be done by practitioners or scholars in appropriate fields. Testing of components should employ instructors for whom the system is being developed.

Testing and revision of the system. When component testing is successfully completed the entire system should be tested with a small number of instructors under conditions described in the specifications. Again an iterative loop is employed to insure that the system performs as intended.

Dissemination. When the system has been successfully tested, it would then be disseminated primarily through faculty development agencies in post-secondary institutions. It is felt that this type of dissemination would allow for the use of a feedback loop to insure that the system can be updated to suit changing environments (Southwest Educational Development Laboratory, 1969).

In fact, the production of the system would not end with dissemination. The production following dissemination involves the periodic update of the system based upon feedback from users of the system.

A practical consideration. Developing one's teaching skills involves time that is often at a premium to faculty. This is a problem of both quantity and logistics. This premium on time must be kept in sight throughout the production of a skill development system.

The self-instructional nature of the system is one attempt to deal with this problem. Another consideration that should pervade the system is that the materials have direct applicability to classroom teaching. Time involved with the system should be well spent. There should be a visible product of their investment of time.

A Prototypic Skill Development System:

Facilitating Student Participation

This study involves the production of a prototype for a skill development system described in the previous section. This section initiates the development of that prototype with the conceptualization and analysis of the skill of Facilitating Student Participation.

Conceptualization. The primary consideration for the practice of any teaching skill is that of the outcomes. How does the practice of a teaching skill enhance learning?

The skill, Facilitating Student Participation, is conceptualized

as the practice or exhibition of behaviors that initiate, activate or support active participation by students in classroom activity. The specific type of participation will be defined by the goals of the activity.

It is important to note that, ultimately, student participation is defined by each instructor through his/her choice of instructional goals. More accurately the question is, what types of outcomes can be enhanced by the practice of a skill. Or, what types of goals can be attained through the practice of a skill.

Gagne (1975) describes the instructional features for five types of expected outcomes:

<u>Type of Expected Outcome</u>	<u>Instructional Feature</u>
Verbal Information	Meaningful context; suggested coding schemes, including tables and diagrams
Intellectual Skills	Prior learning and recall of prerequisites skills
Cognitive Strategy	Occasions for novel problem-solving
Attitude	Experience of success following the choice of a personal action; or observation of these events in a human model
Motor Skill	Learning of executive routine; practice with informative feedback

Each of these outcomes calls for some degree of student participation in learning experiences.

Several authors (Gagne, 1965; Biehler, 1971; Loree, 1970; McKeachie, 1969) suggest that students who have the opportunity to practice and recite what they are learning show greater gains than those who do not have those opportunities. Students

participating in classroom activities also get feedback about their efforts, another important factor in the enhancement of learning (Davis, Alexander, and Yelon, 1974). A classroom in which students may participate also provides necessary opportunities for those students who learn more effectively when they are actively involved in their educational experiences (Rogers, 1969).

An important benefit for an instructor is that student participation in the classroom is a valuable source of feedback about one's teaching effectiveness. This feedback provides information about student achievement of course goals. Student participation is a source of variety in the classroom and an often welcome change from the traditional lecture. Students can be a source of the energy required of instructors.

The issue that arises from this discussion is not whether there should be student participation in the classroom, but how can the appropriate degree of participation be developed and maintained. The degree is determined by the type of learning expected, the goals of instruction.

Analysis of skill components. Student participation in classroom activities is a complex phenomenon dependent upon a number of related and unrelated factors. The skill of Facilitating Student Participation addresses several of those factors that an instructor has some direct influence and control. They are communication, individual or role behavior, group behavior, and feedback. Some alternatives for student participation are also included.

Communication in the classroom. Communication is probably the primary process in education. Instructors communicating their expertise to students is central to classroom activity. Effective communication is critical to successful classroom activity.

It is effective communication that is the issue. Simply stated, effective communication is a matter of understanding and being understood (Combs, et al, 1971).

How does the communication break down? A basic problem is the fact that what is communicated is not what is intended but rather what is comprehended (Combs, et al, 1971).

An important question to be considered is that of how to make one's communication more effective. How can an instructor be better understood by his/her students?

First, is the recognition of responsibility in effective communication. In general, responsibility lies with the instructor, not with the students (Combs, et al, 1971). Accepting this responsibility, the next step involves a closer look at communication and some of the characteristics of effective communication.

When one makes a statement that is intended to be communicated there are three factors to consider: the meaning of the words, the emotional impact of the words, and the non-verbal aspects of the communication.

Do the students know the meaning of the words that the instructor uses? The everyday jargon of an expert in a field is likely to be over the heads of most undergraduate students.

What kind of emotional impact are the words likely to have?

Students often react emotionally to an idea that an instructor views objectively.

What is suggested by the posture or facial expression of an instructor as he/she speaks? A good deal of the information we take in is based upon non-verbal cues such as facial expression, posture, tone of voice, eye contact, animation, etc. (Combs, et al, 1971).

A characteristic of effective communication is that it is related in some way to that which students want or need to know (Combs, et al, 1971). These needs may be related to examinations or other course requirements, or to the interests or curiosities of the students. A question for an instructor to consider is, "Why will students want to know about what I have to say?" The need must be perceived by the students.

Simplicity has great value in effective communication. Simple explanations are more likely to be comprehended by students. Again, what is simple to a scholar in a field is not necessarily simple to a student. The simplicity will be decided by the student.

Closely related to simplicity is the fact that the speed and pacing of effective communication is related to the rate of comprehension. Time must be spent in making certain that meanings are conveyed. It is important that instructors find out whether or not they are being understood.

Given that communication is an interactive process, an important aspect of effective communication is listening. Effective listening includes attending to verbal and non-verbal expressions and acquisition

of listening skills requires conscious effort. The payoff, however, is well worth the effort. Students are more likely to communicate with an instructor who listens to what they have to say.

Role behavior in the classroom. Organizational psychology provides a valuable perspective for looking at another factor involved in student participation. One may look at the behavior of both students and instructors in a classroom in terms of the role they perform. It is usually easy to determine who are the students and who are the instructors in a classroom situation.

Typical actions in these situations are examples of role behavior. According to social psychologists, role behavior refers to the recurring activities of others, appropriately interrelated with the respective activities of others so as to yield a predictable outcome (Katz & Kahn, 1966). In general terms, the predictable outcome of the interaction between instructor activities and student activities is learning.

Our role behavior is largely determined by expectations we have for ourselves and others. These expectations are the prescriptions and proscriptions of attitudes about what a person should and should not do as a part of their role (Katz & Kahn, 1966). Unfortunately, teachers and students seldom communicate explicitly about the role expectations they have for one another.

Role expectations are, however, communicated in two basic ways. First, there are direct instructions, typically, by the teacher. A syllabus is often the source of these instructions. Second, and generally more powerful, are verbal and non-verbal

actions in the classroom that attempt to influence the students' or the instructor's behavior. For example, students attempt to influence instructors to lecture by sitting passively during class. Or, instructors attempt to influence students to sit passively by not recognizing students with questions.

Again, as with all communication, it is the expectation that is perceived rather than that which is intended which influences behavior (Katz & Kahn, 1966). This fact stresses the importance of making expectations explicit.

The next step is to eliminate as much conflict between expectations as possible. Typically conflict occurs when expectations are incompatible, for example, when a teacher expects students to take notes and join discussions during class. Or conflict may occur when the expectations of an instructor are beyond the capabilities of the students, for example, when an instructor expects students to discuss material that is not clearly understood by them.

Students also find themselves overloaded so that they cannot complete all of the tasks urged by various people within the stipulated time limits and requirements of quality. This is a particularly debilitating type of conflict.

Clarifying expectations and reducing conflict involved increases the likelihood that students, individually, will meet those expectations. The next factor involved in students' participating in classroom activities involves the behavior of people in groups.

Group behavior in the classroom. Most classroom situations in

which students actively participate involve a group task or problem to be solved. As students participate in these activities, the classroom takes on the characteristics of a group situation.

Those who study the behavior of people in groups have found that in most successful group situations, two types of needs must be met. First, the group must progress toward a solution to its problem. This type of activity is called task behavior and includes: initiating activity, seeking information, seeking opinions, giving information, elaborating, coordinating, summarizing, evaluating, diagnosing, and testing for consensus. Second, the group feeling must be strengthened and maintained. This type of activity is called maintenance behavior and includes: encouraging, gate-keeping, standard setting, following, expressing group feelings, mediating, and relieving tension. For the group situation to be productive, there must be a balance of task and maintenance behavior and a minimum of disfunctional behavior. Disfunctional behavior, including being aggressive, blocking, self-confessing, competing, seeking sympathy, horsing around, seeking recognition, and withdrawal, is an indication that the group activity is not satisfying individual needs (Bradford, 1961).

The group activities in the classroom will be more efficient if the instructor and the students work toward improving their roles in these activities. This can be done by: becoming aware of necessary behavior; becoming more aware of the degree to which they contribute to the group through their behavior; working at improving their skill in performing group behaviors; reducing the

number of unproductive questions; and by reducing the amount of unnecessary verbiage (Bradford, 1961).

Feedback in the classroom. Typically, students receive feedback about their performance in a course through examinations and other written assignments. This feedback gives students information about both how well they are doing and what they need to do to be successful in their efforts. Students also need this type of information about their efforts in classroom participation. Constructive feedback will provide them with the ongoing guidance that many students need in order to be active classroom participants.

Bergquist and Phillips (1975) list the characteristics of constructive feedback.

It is specific rather than general. To be told that one is "dominating" will probably not be as useful as to be told that "in the conversation that just took place, you did not appear to be listening to what others were saying, and I felt forced to accept your arguments."

It is focused on behavior rather than on the person. It is important that we refer to what a person does rather than to what we think or imagine he is. Thus we might say that a person "talked more than anyone else in this meeting" rather than that he is a "loud-mouth." The former allows for the possibility of change; the latter implies a fixed personality trait.

It takes into account the needs of both the receiver and giver of feedback. Feedback can be destructive when it serves only our own needs and fails to consider the needs of the person on

the receiving end. It should be given to help, not to hurt. We too often give feedback because it makes us feel better or gives us a psychological advantage.

It is directed toward behavior which the receiver can do something about. Frustration is only increased when a person is reminded of some shortcoming over which he has no control.

It is well-timed. In general, feedback is most useful at the earliest opportunity after the given behavior (depending, of course, on the person's readiness to hear it, support available from others, and so forth). The reception and use of feedback involves many possible emotional reactions. Excellent feedback presented at an inappropriate time may do more harm than good.

It involves sharing of information, rather than giving advice. By sharing information, we leave a person free to decide for himself, in accordance with his own goals and needs. When we give advice we tell him what to do, and to some degree take away his freedom to decide for himself.

It involves the amount of information the receiver can use rather than the amount we would like to give. To overload a person with feedback is to reduce the possibility that he may be able to use what he receives effectively. When we give more than can be used, we are more often than not satisfying some need of our own rather than helping the other person.

It concerns what is said and done, or how, not why. The "why" takes us from the observable to the inferred and involves assumptions regarding motive or intent. Telling a person what

his motivations or intentions are more often than not tends to alienate the person and contributes to a climate of resentment, suspicion, and distrust; it does not contribute to learning or development. It is dangerous to assume that we know why a person says or does something, or what he "really" means, or what he is "really" trying to accomplish. If we are uncertain of his motives or intent, this uncertainty itself is feedback, however, and should be revealed.

It is checked to insure clear communication. One way of doing this is to have the receiver try to rephrase the feedback he has received to see if it corresponds to what the sender had in mind. No matter what the intent, feedback is often threatening and thus subject to considerable distortion or misinterpretation.

It is followed by attention to the consequences of the feedback. The person who is giving feedback may greatly improve his helping skills by becoming acutely aware of the effects of his feedback. He can also be of continuing help to the recipient of the feedback.

It is an important step toward authenticity. Constructive feedback opens the way to a relationship which is built on trust, honesty, and genuine concern. Through such a relationship, you can achieve one of the most rewarding experiences that one can achieve and will have opened a very important door to personal learning and growth.

Classroom structures that increase the potential for participation.

Class discussion - Class discussions are initiated and led by the teacher. He/she exercises a good deal of control over

the direction of the discussion. All students are expected to participate and often are asked to contribute in turn, in order to begin the discussion. It is most appropriate for dealing with specific topics or questions.

A major limitation of this method is that it is effective in classes of twenty students or less. The material for the discussion must be carefully planned to allow for some clear focus.

Small group discussion - Small group discussions are initiated by the teacher and are conducted by small groups (three to four) of students. They deal with a specific issue or question for a short period of time (five to ten minutes). These discussions are most appropriate for dealing with very specific topics or questions.

Small group discussions are effective when the directions and the topic for discussion is clear to the students.

Panel discussion - This method involves a selected group of students who discuss an issue in front of the entire class. The class joins in the discussion after a set period of time. It is an effective way of stimulating discussion in larger classes.

This type of discussion may become emotional and the focus shifting from the content to the personalities of the panel members.

Symposium - This method involves a small group of persons who are well informed on various aspects of a particular topic. The members of the symposium give reports and respond to questions from the entire class. This is an effective alternative for presenting specific information.

Like a panel discussion, the focus may shift from the content

to the personalities of the speakers.

Debate - This is a pro-con discussion of controversial issues. The speakers attempt to convince the class of their point of view. It is most effective in dealing with issues with definitive sides.

A problem with debate is that objectivity is often difficult to maintain.

Discussion techniques.

Reverse thinking - In this technique students are asked to express their thoughts in reverse. It must be used in combination with other discussion methods. Reverse thinking helps students to gain insights into other points of view. It can, however, become confusing.

Role playing - This involves selected members of the class acting out a situation or incident. It is particularly helpful in gaining insight into the dynamics of a situation. A limitation of this technique is that the actors may become self-conscious.

Brainstorming - This is a group problem-solving technique based upon creative thinking in a short period of time (five minutes). It is effective in generating numerous alternative solutions. The rules are: 1) the emphasis is on quantity, the more ideas, the better; 2) there is no evaluation of ideas, that can be done later; 3) offbeat ideas are welcome; and 4) taking off on others' ideas is encouraged. One member of the class records the ideas.

Brainstorming must be used in conjunction with other discussion methods. It will not stand on its own.

Learning cell - The learning cell involves a brief focused

discussion between two students about particular reading assignments. The instructor provides several questions for the dyads (cells) to discuss.

This is particularly effective for establishing the base for large group discussions.

Student-led activities - All of the above methods may be led by students with the supervision of the teacher.

Summary: Facilitating Student Participation. Facilitating student participation is conceptualized as the practice or exhibition of behaviors that initiate, activate, or support active participation by students in classroom activities that are intended to produce particular outcomes. The analysis of the skill is that participation is facilitated when there is effective communication between the instructor and students including clear definition of the role of students in the classroom, and effective feedback about their performance; and an environment conducive to group activity.

Development of the skill is based upon the premise that the instructor is responsible for and largely in control of these factors.

C H A P T E R I I I

SYSTEM PRODUCTION: FACILITATING STUDENT PARTICIPATION

A teaching skill development system was produced. This prototype system deals with the skill Facilitating Student Participation. Conceptualization and Analysis of Skill Components were presented in Chapter II. This chapter describes steps in the production of the system excluding Revision of the System and Dissemination.

The production was divided into three phases. Phase I, Substantive Development, included Conceptualization, Analysis of Skill Components, and preliminary Preparation of System Components. The goals of this phase were to develop the materials so that the content and approach were acceptable to several teaching skill development experts, and to gather the input of these experts for subsequent production. Phase II, Component Development, continued the Preparation of System Components and included Testing and Revision of Components. The goals of Component Development were to develop the components of the system so that they were acceptable and useful to potential users and to gather their input for revisions in materials. Phase III, Pilot Test, dealt exclusively with the Testing of the System. The goals of Phase III were to determine the effectiveness of the system in developing the skill and its acceptability to users.

Revision of the System and Dissemination will be discussed in Chapter IV.

Phase I: Substantive Development

Conceptualization and analysis of skill components. Conceptualization and Analysis of Skill Components of Facilitating Student Participation were an outgrowth of the author's experience as a Teaching Improvement Specialist (TIS) at the Clinic to Improve University Teaching (Clinic), University of Massachusetts, Amherst. This experience included direct consultation with approximately eighty instructors (including faculty and graduate teaching assistants), consultation with other TIS's on their work with approximately eighty instructors, and the training and supervision of approximately thirty TIS's.

The majority of this interaction focused on the Clinic's teaching improvement process. Improvement strategies implemented through the "Clinic process" were often designed to develop skill in facilitating student participation. It was an area that many instructors sought to improve.

Conceptualization. In general, the thrust of improvement strategies in this area was for instructors to practice or exhibit behaviors that initiate, activate, or support active participation by students in classroom activities that was intended to produce particular learning outcomes.

Analysis of skill components. Interventions associated with these improvement strategies typically addressed one or more of several factors. Communication between an instructor and students was ineffective. Students were unsure of what they were expected to do in the classroom. The atmosphere in the classroom was not

conducive for group activity. Students who attempted to participate received little or no feedback about their efforts and stopped participating. Instructors were unaware of methods and classroom activities that could increase student participation. The resulting analysis is that participation is facilitated when there is effective communication between the instructor and students, including clear definition of the role of students in the classroom and effective feedback about their performance, and an environment and a structure conducive to group activity.

Preliminary research. It was decided that there should be a system component to correspond to the three characteristics of skill development described in Chapter II. An explication component would attempt to establish a mental model for the skill, an exercise component would attempt to initiate actions approximating that model, and an evaluation component would attempt to provide feedback about skill related actions.

An outline of the skill development system was constructed including general specifications, explication including supporting literature of the Conceptualization and Analysis of Skill Components, skill evaluation procedures, and several exercises based on successful teaching improvement strategies. This preliminary research (Appendix C) was submitted to Dr. Sheryl Riechmann, Director of the Center for Instructional Resources and Improvement at the University of Massachusetts, Amherst, for review.

Reaction to the substance of the materials was positive. It was suggested that components be organized so that the evaluation

section follow the exercise section.

Preliminary development of system components. A draft of the components of the system was written from the preliminary research and Dr. Riechmann's suggestions. The focus of the development of the draft was to highlight the substance of the components, with emphasis on the explication and exercise sections. Guidelines for review were written, reviewers were contacted and the review was scheduled. Instructions for the review were written and the Phase I Development and Substantive Review Materials (Appendix D) were distributed to the reviewers.

Phase II: Component Development

Substantive review. The purpose of this review was to determine whether or not basic changes in the substance of the materials were necessary before production could continue; and to gather comments and reactions to the materials that could be incorporated into subsequent development.

The review was carried out by Dr. Christopher Daggett, Director of the Instructional Development Project at McGill University, and Dr. Bette Erickson, Assistant Director of the Instructional Development Service at the University of Rhode Island. Both are Clinic trained TIS's with considerable experience in teaching skill development.

Comments and reactions of the reviewers were mixed. However, they gave no indication that the basic substance of the materials should be changed. In general, their comments suggested that the

materials be more specific, use more examples, and eliminate as much jargon as possible. Specific comments gave direction to the development of the components.

Component development. The components of the system were rewritten using the suggestions from the Substantive Review. The focus of this development was to prepare the components for use by potential users of the system.

Guidelines for component review and testing were developed, reviewers were contacted and the review was scheduled. Phase II Development and Component Review Materials (Appendix E) were distributed for review.

Component review and testing. The components of the system were reviewed and the exercises tested by potential users.

Component review. The purpose of the review was to determine whether or not the components of the system were appropriate for the population it was designed for; to determine whether or not the explication and evaluation components accomplished their goals, and to gather comments and reactions to be used in Prototype Development.

Four faculty members at the University of Massachusetts, Amherst, agreed to review the system components. They were: Mr. Steven Arons, Legal Studies; Dr. Michael Ford, Political Science; Dr. Michael Jackson, Afro-American Studies; and Dr. David Storey, Food and Resource Economics.

Reviewers reviewed materials according to the guidelines

in the Component Review Materials and were interviewed following their review.

The comments of the reviewers indicated that the materials appropriately addressed conditions in their classrooms. Their comments indicated that the explication and evaluation components accomplished their goals and predicted that the exercises would accomplish theirs. Specific comments about the materials provided direction for prototype development.

Exercise testing. The purpose of exercise testing was to determine whether or not the exercises accomplished their goals in the existing format.

Mr. Arons and Dr. Ford tried exercises number 2, 3, and 4 in their classrooms. These try-outs were observed by the author.

Classroom observations and follow-up discussions indicated that the exercises accomplished their stated goals.

Prototype development. System materials were rewritten incorporating suggestions of reviewers, and with the assistance of Dr. Dwight Allen, Professor of Education, University of Massachusetts, Amherst. The prototype skill development system was ready for its Pilot Test.

A videotape rating instrument was developed to measure teacher-student verbal interaction. A booklet evaluation form was designed, subjects were contacted and the Pilot Test was scheduled. The Pilot Test Package (Appendix F) was prepared for distribution.

Phase III: Pilot Test

Eight post-secondary instructors took part in a four-week Pilot Test of the skill development system. The purpose was to determine whether or not the system under specified conditions was effective in developing the skill; and to determine whether or not the system was acceptable to its users.

Subjects. Eight faculty members at Quincy Junior College, Quincy, Massachusetts, volunteered to participate in the Pilot Test. Because of the in-class evaluation involved they were guaranteed confidentiality and, therefore, will not be identified. They taught courses in: Chemistry, Abnormal Psychology, Roles of Women in Society, Criminal Evidence and Investigation, Business Law, Oral Communications, Criminal Law, and Literature. There were three women and five men.

Test procedure. Each instructor chose one course to focus skill development activities. A videotape was made in a class session of the focal course. The Pilot Test Package was distributed at the end of that class meeting. Instructors used the prototype system for four weeks at which time a second videotape was made and booklet evaluation forms were collected.

Evaluation procedure.

Booklet evaluation. The primary purpose of the booklet evaluation form was to determine the acceptability of the system. There were also items about skill development. Positive responses would indicate acceptability and instructor perceptions of skill

development.

Videotape rating. A videotaped sample of each instructor's in-class teaching behavior was collected at the beginning and completion of the pilot test. The pre- and post-tapes were compared to describe changes in behavior.

The Teacher/Student Verbal Behavior Instrument (TSVBI) based upon the Analysis of Skill Components was developed to classify, qualify, and quantify the verbal behavior of teachers and students. The instrument is accompanied by a manual (Appendix G).

Videotape recordings of each participants' focal class were made during the ninth week of the Fall, 1978 semester. System materials were distributed at the end of the pre-tape (T_1) session. Tapes were made again during the thirteenth week of the semester. This post-tape (T_2) session marked the end of the Pilot Test. The tapes were made in accordance with the procedures defined in the TSVBI manual.

Two tape raters were trained to use the TSVBI. The training included a review and discussion of the instrument with the author; a sample tape rated by the raters in collaboration.

A second sample tape was rated independently achieving interrater reliability of $r = +.53$. The raters discussed their ratings between themselves and a third sample tape was rated. Interrater reliability achieved was $r = +.89$, which was considered to be an acceptable level of agreement in order to proceed with the Pilot Test Tapes. Tapes were arranged by T_1 and T_2 in alphabetical order by participants' last names. One rater rated the T_1 of Teacher A, C, E, G and T_2 of

TABLE 1
BOOKLET EVALUATION RESPONSES

Section I - Explication

The information presented in this section is:

A. $\bar{X} = 4.375$ $S_x = .992$
 1 2 3 4 5
 unclear clear

B. $\bar{X} = 4.125$ $S_x = .781$
 1 2 3 4 5
 irrelevant relevant

C. $\bar{X} = 4.25$ $S_x = .829$
 1 2 3 4 5
 not useful useful

Section II - Exercises

The exercises in this section are:

A. $\bar{X} = 4.375$ $S_x = .857$
 1 2 3 4 5
 unclear clear

B. $\bar{X} = 3.875$ $S_x = 1.166$
 1 2 3 4 5
 irrelevant relevant

TABLE 1 -- Continued

 Section II - Exercises -- Continued

The exercises in this section are:

C.	$\bar{X} = 3.875$	$S_x = 1.053$
1	2	3
4	5	
not useful		useful

Section III - Evaluation

The material presented in this section is:

A.	$\bar{X} = 3.875$	$S_x = 1.053$
1	2	3
4	5	
unclear		clear

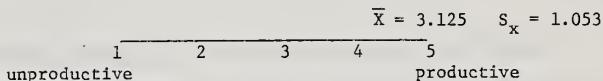
B.	$\bar{X} = 3.875$	$S_x = 1.053$
1	2	3
4	5	
irrelevant		relevant

C.	$\bar{X} = 3.5$	$S_x = .707$
1	2	3
4	5	
not useful		useful

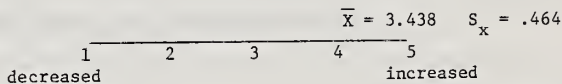
TABLE 1 -- Continued

Booklet (overall)

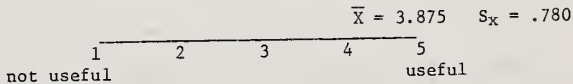
The experience provided through use of the booklet were:



As a result of using this booklet, student participation in classroom activities has:



As a means of developing skill in facilitating student participation, this booklet is:



Teacher B, D, F, H, and the other rated the T_1 of Teacher B, D, F, H and T_2 of Teacher A, C, E, G. All tapes were identified to the raters by random number only. Tape Rating Forms were completed by raters. Pre-Post Comparison forms were then completed for individual participants and the group (Appendix H).

Pilot Test data. Data to determine user satisfaction with the system and its effect on classroom behavior was collected during the Pilot Test.

Booklet evaluation. The booklet evaluation form filled out by participants had sections dealing with each of the three components of the system, the system overall, and self-perception of change. Participants reacted to adjective pairs and made comments about the system. Item responses are contained in Table 1. Comments made by participants are compiled in Appendix I.

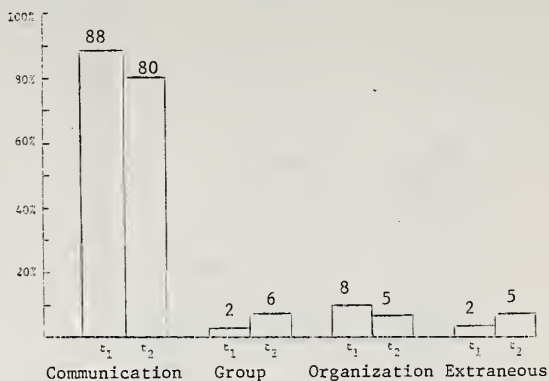
Participants responded most positively to the Explication Component. They indicated that it was clear ($\bar{X} = 4.375$), relevant ($\bar{X} = 4.125$), and useful ($\bar{X} = 4.25$).

They were somewhat less positive about the Exercise Component, with the mean of responses: 4.375 for clarity, 3.875 for relevance, and 3.875 for usefulness.

The responses for the Evaluation Component were somewhat positive on clarity (3.875) and relevance (3.875) and slightly positive (3.5) on usefulness.

The participants were somewhat neutral (3.125) about the productivity of use of the system. They indicated that student participation had increased slightly (3.438). The system was seen

A. Percentage of Pre(t_1) and Post(t_2) test instructor events for behavior categories



B. Percentage of Pre(t_1) and Post(t_2) instructor events by ratings, and percentage of instructor events for all rated events

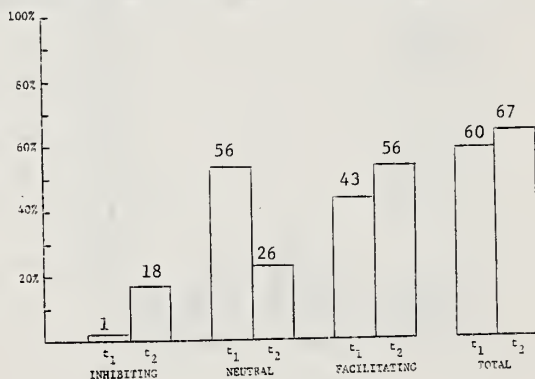
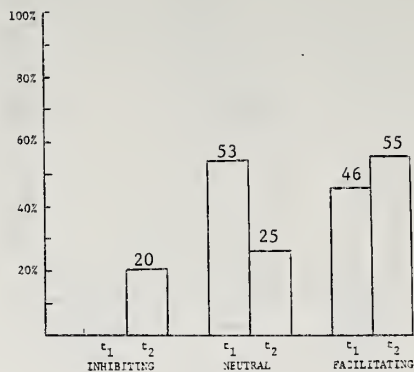


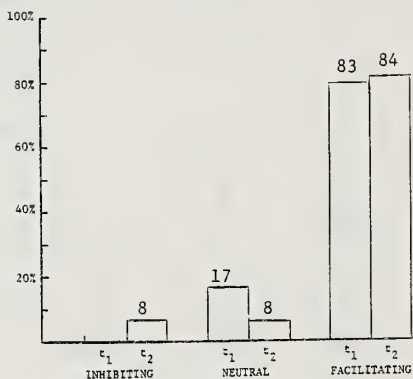
Figure 4

Grouped Video Rating Results - Instructor Events

C. Percentage of Pre(t_1) and Post(t_2) test ratings for each behavior category

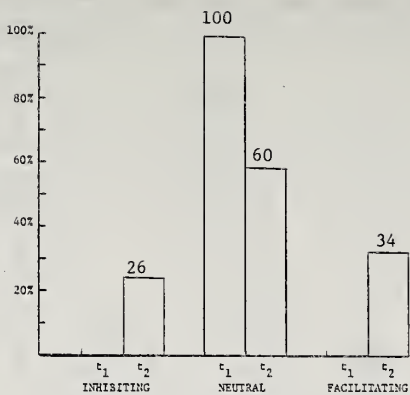


Communication

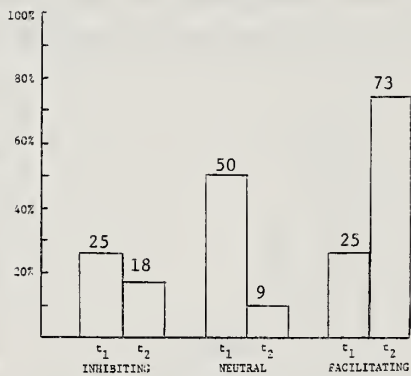


Group

Figure 4 - continued



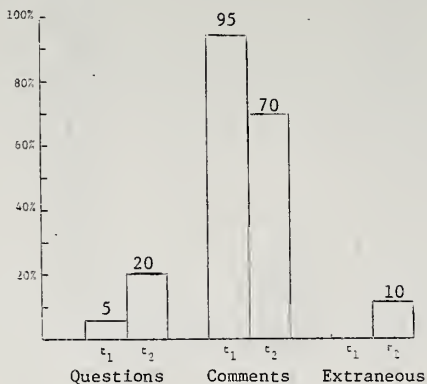
Organization



Extraneous

Figure 4 - continued

A. percentage of Pre(t_1) and Post(t_2) test student events for behavior categories



B. Percentage of Pre(t_1) and Post(t_2) test student events by ratings, and percentage of student events for all rated events

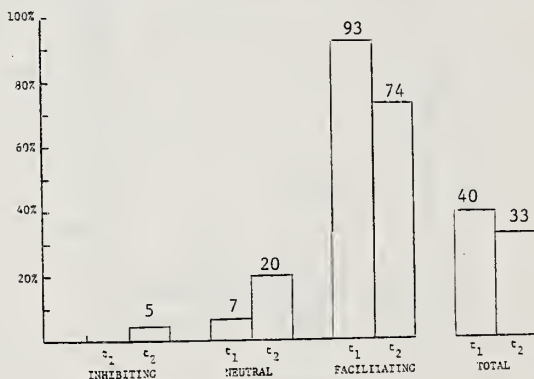
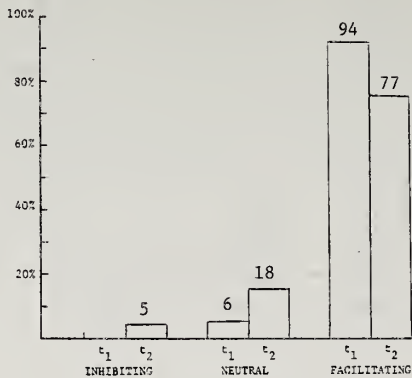


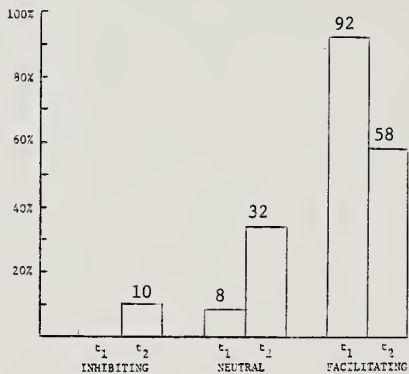
Figure 5

Grouped Video Rating Results - Student Events

C. Percentage of Pre(t_1) and Post(t_2) test ratings for each behavior category

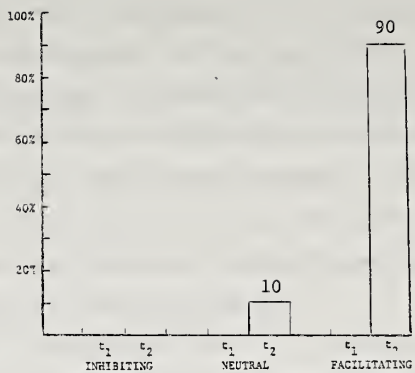


Questions



Comments

Figure 5 - continued



Extraneous

Figure 5 - continued

as somewhat useful (3.875) as a means of developing skill.

Six of the eight participants indicated that they would make use of systems dealing with other teaching skills.

Videotape ratings. The data provided by the TSVBI described verbal behavior in terms of the frequency of instructor Communication, Group, Organization, and Extraneous Statements; or student Questions, Comments, and Extraneous Statements; and whether these events were Inhibiting, Somewhat Inhibiting, Neutral, Somewhat Facilitating or Facilitating to student participation.

Figure 4 illustrates this data in: A, the percentage of instructor events for each behavior category (Communication, Group, Organization, and Extraneous); B, the percentages of Inhibiting (events rated as inhibiting or somewhat inhibiting), Neutral, and Facilitating (events rated as somewhat facilitating or facilitating) events for all instructor events; and C, percentages of ratings for each behavior category.

Figure 5 similarly describes the data for student events. Student behavior categories are Questions, Comments and Extraneous. Section B of Figures 4 and 5 include the percentage of instructor and student events for all rated events. The percentages for T_1 and T_2 are compared with T_1 data on the left of each graph section.

In the T_1 sample instructor events made up 60% of all events in the sample. Communication events made up 88% of all instructor events, of these 0% were Inhibiting, 53% were Neutral, and 46% were Facilitating. Group events were 2% of the total, 17% Neutral,

and 83% Facilitating. Eight percent of instructor events were classified Organization, of these 100% were Neutral. Extraneous events were 2% of the total, 25% were Inhibiting, 50% were Neutral, and 25% Facilitating. Of all instructor events, 1% were Inhibiting, 56% were Neutral, and 43% Facilitating.

Student events comprised 40% of all events. Five per cent of student events were Questions, 8% were Neutral and 92% were Facilitating. Comments made up 95% of student events, 6% Neutral, and 94% Facilitating. All student events were 7% Neutral and 93% Facilitating.

Instructor events made up 67% of all events in T_2 . Eighty per cent of these events were classified as Communication, with 20% Inhibiting, 25% Neutral, and 55% Facilitating. Group events made up 6% of the total, 8% were Inhibiting, 8% Neutral, and 84% Facilitating. Organization were 5% of the total, with 6% Inhibiting, 60% Neutral, and 34% Facilitating. Extraneous events were 5% of instructor behavior, 18% Inhibiting, 9% Neutral and 73% Facilitating. Eighteen per cent of all instructor events were Inhibiting, 26% Neutral, and 56% Facilitating.

Student events were 33% of all events in T_2 . Questions comprised 20% of student events, 10% being Inhibiting, 32% Neutral, and 58% Facilitating. Seventy per cent of student events were Comments, 5% were Inhibiting, 18% Neutral, and 77% Facilitating. Ten per cent of student events were extraneous, 10% being Neutral, and 90% Facilitating. Total student events were 5% Inhibiting, 20% Neutral, and 74% Facilitating.

Summary. Eight post-secondary instructors participated in a four-week pilot test of the prototype skill development system. Each implemented the system in a focal class, and evaluated the system. Pre- and Post-test videotape recordings were made and rated using the TSVBI. All data was compiled and reported, ending Phase III of production.

CHAPTER IV

PRODUCTION OUTCOMES

Pilot Test Findings

Pilot Test data indicate somewhat mixed results. Videotape ratings did not suggest that the skill was successfully developed. However, the test subjects suggested that they were somewhat satisfied with the system.

Changes in behavior. Instructor events rated as Facilitating increased 13% t_1 to t_2 . This positive change is somewhat outweighed by the 17% increase of Inhibiting events. In all behavior categories instructor events became both more facilitating and more inhibiting. Total events in each category changed only slightly, and total instructor events increased slightly.

Instructors stated that student participation had increased slightly as a result of the use of the system. Tape samples indicated that there were 7% fewer student events. The number of questions asked by students, however, increased by 15% in t_2 .

It appeared that instructors became somewhat more Inhibiting to student participation, but students did ask more questions and made more extraneous statements. It was not determined whether students spent more or less time participating in class. In two of the t_2 , students were giving reports on semester projects and tended to make fewer statements over a similar period of time.

The time in which t_2 were made may explain the increase in instructor events of Inhibiting behavior. The Pilot Test ended on the week preceeding a two week holiday vacation. At this point

there appeared to be more pressure on instructors to have accomplished a certain amount of their curriculum. The situation was similar to the "end of semester rush" experienced by many instructors.

Another factor that could have affected ratings is the increased familiarity between instructors and students at the time t_2 samples were collected. This familiarity could have been viewed as Inhibiting by raters.

The data of two individual instructors (D and F) did show a substantial increase in student events.

User satisfaction. Data concerning user satisfaction with the system was more positive than tape ratings. Participants stated that the experience was slightly productive and that student participation had increased slightly. They saw the system as somewhat useful and most would use similar systems for other skills. While the responses are not overwhelming, there were indications that the subjects were satisfied with the system.

Discussion of Pilot Test. The purpose of the Pilot Test was to test the system under conditions described in the specifications to determine whether or not the system effectively and satisfactorily developed the skill. Test results do not support dissemination of the system.

Comments of participants suggest several changes in system materials. It appeared that more examples would be helpful. One instructor felt that the "forbidding and pretentious" language should be simplified. However, other comments and data do not

indicate that language was a problem. Efforts should be made to reduce time required for activities.

The lack of congruence between tape ratings and system evaluation seem to indicate that the absence of positive behavioral change could be due to difficulty in instrumentation. The one month duration of the Pilot Test was seen as a "... short period of time ... to assimilate this information." One participant commented that more time was needed " ... to prepare appropriate changes in style and in teaching materials." This concern with the amount of time involved was also voiced informally by participants at the end of the Pilot Test.

Discussion of Production Method Outcomes

The production of the self-instructional system had two basic outcomes. The skill development system, Facilitating Student Participation, is the substantive outcome. While significant change was not indicated, there were indications that the users were satisfied with the system. Some minor changes in system materials are indicated but it is suggested that changes be made in Pilot Test instrumentation before the prototype system is disseminated.

The production method employed for the study was the procedural outcome. It performed well from a strategic point of view. The difficulty of instrumentation in the Pilot Test is a tactical consideration. Changes made at that point do not necessarily change the overall procedure.

Considering that the system and production method were prototypic for a number of teaching skills, it appears worthwhile that several changes be made in the production method.

Recommended Changes in Production Method

In order to acquire a more accurate comparison of behavior it is recommended that the pre-post comparisons of videotape ratings be made at similar points in subsequent semesters. In that way the comparison is not affected by changes in classroom behavior due to time. Also an interaction instrument providing data about the amount of time students and teachers speak should be considered.

More extensive and systematic testing of exercises would insure that they could be easily applied to a wide variety of disciplines.

The development of a prototypic skill development system was a major goal in the study. This goal was accomplished and the prototype system appears to have merit as such. It is felt that the system and method of production is a worthwhile beginning. Moderate funding supporting the production of other skill development systems using this approach is likely to have favorable results in terms of materials produced and their use.

Potential for Use

The potential for use of the production method and the skill development systems produced suggest that the lack of strong positive results should not preclude its use of the production of skill development systems.

Its strength appears to lie in the overall organization it

provides for the planning of production. It also provides possibilities for differentiation of staff involved in production.

Recommendations for Further Research

Several areas for further research arose during the study.

The first was a number of teaching skills for which development systems could be produced. Among these skills are: classroom organization, evaluation of student performance, questioning, curriculum design, and lecturing.

Another area was the question of the long range impact of skill development on instructor and student behavior.

A particularly difficult question for research is that of learning outcomes of the practice of particular teaching skills. Long range studies would provide a wealth of information in this area.

This study, as most instructional development activities in higher education, relied on volunteers. While a great deal can be learned in this way, it limits the generalizability of results. Instructional development research using a random sample of the population will be necessary in order to make significant impact on teaching in higher education. This issue is one felt by many involved in instructional development. It concerns the fact that in reality there is little connection between the reward system - promotion, tenure - and the development or improvement of instruction.

This issue goes beyond a question of research and into that

of policy and practice of administration. Until instructors are held accountable for their instruction, provided with the resources to develop instructional skills, and positively rewarded for their efforts, the quality of instruction in higher education is not likely to change.

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APPENDIX A
TABS QUESTIONNAIRE

Teaching Analysis By Students

[TABS]

The Clinic to Improve University Teaching is working with instructors to improve the quality of teaching which they offer to their students. The Clinic is designed to help instructors identify and effectively use their particular teaching strengths, to isolate their specific teaching problems, and to develop improvement strategies directed at these problems.

In order to identify these strengths and problems, we are collecting information about teaching in this course by discussing course objectives and teaching patterns with your instructor, by observing and video-taping some classes, and by asking for student opinions about performance on some specific teaching skills and behaviors. The information will be used to obtain a clearer understanding of specific teaching strengths and weaknesses so that your instructor can work toward improvement. Thus, your responses will be of most value to your instructor if they are thoughtful and honest. Your cooperation will be very much appreciated.

Clinic to Improve University Teaching
School of Education
University of Massachusetts at Amherst

Section I—Teaching Skills and Behaviors

In this questionnaire there are some statements concerning a variety of specific teaching skills and behaviors. Please read each statement carefully and then indicate the extent to which you feel your instructor needs improvement. Respond to each statement by selecting one of the following:

1. No improvement is needed
(very good or excellent performance)
2. Little improvement is needed
(generally good performance)
3. Improvement is needed
(generally mediocre performance)
4. Considerable improvement is needed
(generally poor performance)
5. Not a necessary skill or behavior for this course

Please make your decisions about the degree of improvement needed on the basis of what you think would be best for this particular course and your learning style. Try to consider each statement separately, rather than let your overall feelings about the instructor determine all the responses.

1. The instructor's explanation of *course* objectives
2. The instructor's explanation of the objectives for each class session and learning activity
3. The instructor's ability to arouse my interest when introducing an instructional activity
4. The instructor's explanation of the work expected from each student
5. The instructor's ability to maintain a clear relationship between the course content and the course objectives
6. The instructor's skill in clarifying the relationships among the various topics treated in the course
7. The instructor's skill in making clear the distinction between major and minor topics
8. The instructor's skill in adjusting the rate at which new ideas are covered so that the material can be followed and understood
9. The instructor's ability to clarify material which needs elaboration
10. The instructor's speaking skills
11. The instructor's ability to ask easily understood questions
12. The instructor's ability to ask thought-provoking questions
13. The instructor's ability to answer questions clearly and concisely
14. The instructor's overall effectiveness as a discussbn leader
15. The instructor's ability to get students to participate in class discussions
16. The instructor's skill in facilitating discussions *among students* as opposed to discussions only between the instructor and students
17. The instructor's ability to wrap things up before moving on to a new topic
18. The instructor's ability to tie things together at the end of a class
19. The instructor's explanation of precisely how my performance is to be evaluated
20. The instructor's ability to design evaluation procedures which are consistent with course objectives
21. The instructor's performance in periodically informing me of my progress

22. The instructor's selection of materials and activities which are thought-provoking
23. The instructor's ability to select materials and activities which are not too difficult
24. The instructor's provision of variety in materials and activities
25. The instructor's ability to use a variety of teaching techniques
26. The instructor's demonstration of creativity in teaching methods
27. The instructor's management of day-to-day administrative details
28. The instructor's flexibility in offering options for individual students
29. The instructor's ability to take appropriate action when students appear to be bored
30. The instructor's availability for personal consultation
31. The instructor's ability to relate to people in ways which promote mutual respect
32. The instructor's maintenance of an atmosphere which actively encourages learning
33. The instructor's ability to inspire excitement or interest in the content of the course
34. The instructor's ability to relate the subject matter to other academic disciplines and real world situations
35. The instructor's willingness to explore a variety of points of view
36. The instructor's ability to get students to challenge points of view raised in the course
37. The instructor's performance in helping me to explore the relationship between my personal values and the course content
38. The instructor's performance in making me aware of value issues within the subject matter

Section II—Other Information

Please mark the appropriate response for each of the following items beside the correct statement number on the answer sheet.

39. Class:
 - (1) freshman
 - (2) sophomore
 - (3) junior
 - (4) senior
 - (5) graduate student
40. Sex:
 - (1) male
 - (2) female
41. Grade point average:
 - (1) less than 1.50 (lowest)
 - (2) 1.50-2.49
 - (3) 2.50-2.99
 - (4) 3.00-3.49
 - (5) 3.50-4.00 (highest)
42. In terms of the directions my life is taking, this course is:
 - (1) relevant
 - (2) somewhat relevant
 - (3) irrelevant
 - (4) I am unsure

43. In this course I am learning:
- (1) a great deal
 - (2) a fair amount
 - (3) very little
 - (4) I am unsure
44. As a result of this course, my attitude toward the instructor is:
- (1) becoming more positive
 - (2) becoming more negative
 - (3) unchanged
45. As a consequence of participating in this course, my attitude toward the subject matter is:
- (1) becoming more positive
 - (2) becoming more negative
 - (3) unchanged
46. I would prefer that this course:
- (1) become more structured or organized
 - (2) become less structured or organized
 - (3) maintain about the present level of structure
47. Which of the following descriptions of student learning styles most nearly approximates your own? (Choose only one.)
- (1) I like to think for myself, work alone, and focus on learning personally relevant content.
 - (2) I prefer highly structured courses and will focus on learning what is required.
 - (3) I try to get the "most out of classes," and like sharing my ideas with others and getting involved in class activities.
 - (4) I am competitive, concerned about getting good grades, and try to learn material so that I can perform better than others.
 - (5) I am generally turned off as a student, uninterested in class activities, and don't care to work with teachers or other students.
48. About how much time and effort have you put into this course compared to other courses of equal credit?
- (1) much more
 - (2) somewhat more
 - (3) about the same amount
 - (4) somewhat less
 - (5) much less
49. Generally, how valuable have you found the assigned readings in terms of their contribution to your learning in this course?
- (1) very valuable
 - (2) fairly valuable
 - (3) not very valuable
 - (4) there have been no assigned readings
50. Overall, I would rate this course as:
- (1) excellent
 - (2) good
 - (3) mediocre
 - (4) poor

APPENDIX B
TEACHING SKILLS AND BEHAVIORS

Clinic to Improve University TeachingTeaching Skills and Behaviors: Definitions and TABS Items

- I. ESTABLISHING A LEARNING SET: the instructor's ability to create in students a cognitive and affective predisposition to engage in a given learning activity (1-4).
- II. LOGICAL ORGANIZATION: the instructor's skill in arranging and presenting course content and learning activities so that students understand the relationships among the various topics, ideas, issues, activities, etc., covered in the course (5-7).
- III. PACING: the instructor's skill in introducing new topics or activities at an appropriate rate and in spending enough, but not too much, time developing those topics or activities (8).
- IV. ELABORATION: the instructor's skill in clarifying or developing an idea or topic (9).
- V. EXPRESSION: the instructor's skills in using verbal (voice tone, inflection, pitch, emphasis) and nonverbal (facial expressions, gestures, body movements) techniques to increase the power and meaning of his/her communication (10).
- VI. ASKING QUESTIONS: the instructor's skill in using various questioning techniques at appropriate times and for a variety of instructional purposes (11, 12).
- VII. RESPONDING TO QUESTIONS: the instructor's ability to answer questions clearly and concisely and with an appropriate emotional tone (13).
- VIII. STUDENT PARTICIPATION: the instructor's skills in facilitating student participation in class discussions and in leading those discussions in fruitful directions (14-16).
- IX. CLOSURE: the instructor's abilities to integrate the major points of a lesson or unit of instruction, to establish a cognitive link between the familiar and the new, and to provide students with a feeling of accomplishment (17, 18).
- X. EVALUATION: the instructor's skills in specifying the criteria for evaluation, in designing valid and reliable evaluation procedures, and in providing adequate feedback to students about their progress (19-21).
- XI. LEVEL OF CHALLENGE: the instructor's skills in selecting course objectives, content, and activities which challenge students' conceptual abilities but which are not too difficult for students to master (22, 23).

-2-

- XII. METHODS AND MATERIALS: the instructor's ability to use various teaching methods effectively and to provide variation in cognitive behaviors, classroom activities, and instructional materials (24, 25).
- XIII. CREATIVITY: the instructor's ability to use creative and imaginative teaching strategies (26).
- XIV. MANAGEMENT: the instructor's skill in performing the organizational and administrative tasks in providing learning experiences for students (27).
- XV. FLEXIBILITY/INDIVIDUALIZATION: the instructor's ability to deal with differing interests and abilities among students in his/her class and to respond constructively to student suggestions, criticisms, comments about his/her teaching strategies (28-30).
- XVI. INTERPERSONAL RELATIONS: the instructor's ability to relate to people in ways which promote mutual respect and rapport (31).
- XVII. LEARNING ENVIRONMENT: the instructor's ability to create and maintain an atmosphere conducive to student involvement (overt and/or covert) and learning (32).
- XVIII. ENTHUSIASM/INSPIRATION: the instructor's abilities to conduct and direct learning activities in a dynamic manner and to stimulate interest and excitement in course content and activities (33).
- XIX. PERSPECTIVE: the instructor's ability to establish a frame of reference for concepts, issues, ideas, etc., and to expand that frame of reference to include an increasingly wider variety of viewpoints, implications, and relationships (34-36).
- XX. VALUE CONTEXT: the instructor's abilities: a) to identify explicitly his/her own values and to clarify the implications of those values in the selection and interpretation of subject matter; b) to explore other values and their implications as they relate to his/her subject matter; and c) to help students clarify their values and recognize the implications of those values for their personal and professional conduct (37-38).

APPENDIX C
PRELIMINARY RESEARCH

Contents

Preface

Overview and Introduction

Explication Section

Evaluation Section

Exercise Section

- A. Skill development and change in behavior
 - 1. The gradual nature of significant change
 - 2. Initial discomfort accompanying new behavior
 - 3. The need for feedback from others
- B. Ownership of skill development
 - 1. Individual responsibility for persistent effort
 - 2. Recognition of change as an often difficult process
 - 3. This handbook as a guide - decisions made by user
- C. Intended user
 - 1. This handbook is intended for use by post-secondary teachers who are actively involved in teaching.
 - 2. So that there is continuity of effort it is felt that the handbook should be used over a semester (or equivalent) by teachers who meet with their classes a minimum once a week.
- D. Personal rewards for good teaching

A. Why student participation

1. Feedback to instructor
2. Feedback to students
3. Variation of classroom stimulus
4. Enhancement of learning: practice and recitation
5. Individual differences in learning style
6. Students as a resource

B. Objectives and intended use of chapter

This chapter's goal is to increase one's understanding of and skill in facilitating productive student participation in the classroom.

1. Explication section

- a. The goal of this section is to increase understanding of some important factors involved in facilitating student participation; i.e. the function of roles in the classroom.
- b. It will review some forms of student participation in the classroom; i.e. small group discussions.
- c. It is intended to be read prior to doing exercises.

2. Exercise section

- a. The goal of this section is to develop one's skills for facilitating student participation in the classroom.
- b. The exercises draw upon the concepts presented in the explication section.
- c. The exercises can be repeated at any appropriate time.

3. Evaluation section

- a. The goal of this section is to provide a means for evaluating one's skills in facilitating student participation.
- b. The evaluation procedures presented may also be repeated at any appropriate time.

4. Resource section

- a. The goal of this section is to provide follow-up resources

for the chapter.

- b. The references are intended to provide for more in-depth examination of the topics presented in this chapter.
- C. Time estimates for use of this chapter by a teacher who meets with a class a minimum of once per week throughout a semester or an equivalent time
1. Planning time
 - a. Approximately 30 additional minutes per week
 - b. Additional planning should diminish with practice
 2. Processing/reviewing time
 - a. Approximately 30 additional minutes per week
 - b. Additional processing/reviewing time should diminish somewhat with practice

Explication Section

The Function of Roles in the Classroom

Communication in the Classroom

Characteristics of Constructive Feedback

Alternatives for Student Participation

A. The Function of Roles in the Classroom (Adapted from Katz & Kahn, 1966)

1. Definition of role behavior - refers to the recurring actions of an individual, appropriately interrelated with the repetitive activities of others so as to yield a predictable outcome.
2. The process of role sending
 - a. Role expectations - the prescriptions and proscriptions of attitudes about what a person should and should not do as part of their role.
 - b. Communication of expectations
 - i. Direct instructions
 - ii. Actions - attempts at influence
 - c. Consequences of compliance or non-compliance of role expectations
3. The received role - A person's perceptions and cognitions of the sent role.
 - a. Influence of the received role
 - b. Effects of illegitimate or coercive expectations
 - c. Other sources of motivation
 - i. Intrinsic satisfaction
 - ii. Self-identity
4. Role Conflict
 - a. Intrasender
 - b. Intersender
 - c. Interrole
 - d. Person - role

B. Communication in the Classroom (adapted from Combs, Avila, & Parkey, 1971)

1. Definition of communication - True communication is a function of common meanings, the overlapping of the perceptual fields of the communicator and communicatee.
2. Verbal communication
 - a. Intention and comprehension
 - b. Incidental learnings - due to lack of agreement on common meanings.
3. Non-Verbal communication
 - a. Information without reference to words
 - b. Hidden curriculum
4. Responsibility for communication - lies with the communicator
5. Relation to need - people take in what information they need to absorb; or the information which is comfortable to them.
 - a. Creating need by connecting links to experience even before information is provided
 - b. Creating need through involving students in planning their own educational experiences
 - c. Creating need by providing opportunities for self-direction
 - d. Relation to immediate need - if one's behavior is to be maintained along a path toward the attainment of a major goal the process of becoming must be enhancing and reinforcing, or else a person will not continue
6. Importance of fit- readiness of the receiver to absorb information

- a. Information can be given meaning when a person discovers the relationship of new experience to that which is already in existence
- b. Cognitive dissonance - lack of harmony between new and old ideas
- c. Value of simplicity - increases the likelihood of comprehension
- d. Speed and pacing - determined by rate of comprehension
- e. Principles and details - emphasis on principles by the teacher is more likely to facilitate change in meaning

7. Openness and Communication

- a. Barriers established in response to threat are important for communication because of the cyclic effects of the threat-counter-threat spiral which has the potential to destroy dialogue. Breaking the threat-counter-threat cycle will call for some combination of the following:
 - i. Attention to the feelings involved in the process of dialogue
 - ii. Absorbing or draining off feelings of threat
 - iii. Contributing to the personal feelings of security in participants
 - iv. Adjusting the interchange to the tolerance levels of the reactors
 - v. Recognition of difference and its value in human affairs contribute to the feeling that "It's alright to be me" and acceptance of similar rights in others
- b. Authority and communication - in the beginning there is only unearned authority, which, with experience becomes

positive or negative earned authority

- i. Unearned authority is likely to be threatening
- ii. Communication is immensely increased by positive earned authority so much so that some of the usual aids to communication may no longer be necessary

8. Listening and communication

- a. The act of listening itself conveys messages to those attended to
- b. Acquisition of skill in listening requires conscious effort
- c. Effective listening includes attending to verbal and non-verbal expressions

C. Characteristics of Constructive Feedback (adapted from Bergquist and Phillips, 1975)

1. It is specific rather than general. To be told that one is "dominating" will probably not be as useful as to be told that "in the conversation that just took place, you did not appear to be listening to what others were saying, and I felt forced to accept your arguments."
2. It is focused on behavior rather than on the person. It is important that we refer to what a person does rather than to what we think or imagine he is. Thus we might say that a person "talked more than anyone else in this meeting" rather than that he is a "loud-mouth." The former allows for the possibility of change; the latter implies a fixed personality trait.

3. It takes into account the needs of both the receiver and giver of feedback. Feedback can be destructive when it serves only our own needs and fails to consider the needs of the person on the receiving end. It should be given to help, not to hurt. We too often give feedback because it makes us feel better or gives us a psychological advantage.
4. It is directed toward behavior which the receiver can do something about. Frustration is only increased when a person is reminded of some shortcoming over which he has no control.
5. It is well-timed. In general, feedback is most useful at the earliest opportunity after the given behavior (depending, of course, on the person's readiness to hear it, support available from others, and so forth). The reception and use of feedback involves many possible emotional reactions. Excellent feedback presented at an inappropriate time may do more harm than good.
6. It involves sharing of information, rather than giving advice. By sharing information, we leave a person free to decide for himself, in accordance with his own goals and needs. When we give advice we tell him what to do, and to some degree take away his freedom to decide for himself.
7. It involves the amount of information the receiver can use rather than the amount we would like to give. To overload a person with feedback is to reduce the possibility that he may be able to use what he receives effectively. When we give more than can be used, we are more often than not satisfying some need of our own rather than helping the other person.

8. It concerns what is said and done, or how, not why. The "why" takes us from the observable to the inferred and involves assumptions regarding motive or intent. Telling a person what his motivations or intentions are more often than not tends to alienate the person and contributes to a climate of resentment, suspicion, and distrust; it does not contribute to learning or development. It is dangerous to assume that we know why a person says or does something, or what he "really" means, or what he is "really" trying to accomplish. If we are uncertain of his motives or intent, this uncertainty itself is feedback, however, and should be revealed.
9. It is checked to insure clear communication. One way of doing this is to have the receiver try to rephrase the feedback he has received to see if it corresponds to what the sender had in mind. No matter what the intent, feedback is often threatening and thus subject to considerable distortion or misinterpretation.
10. It is followed by attention to the consequences of the feedback. The person who is giving feedback may greatly improve his helping skills by becoming acutely aware of the effects of his feedback. He can also be of continuing help to the recipient of the feedback.
11. It is an important step toward authenticity. Constructive feedback opens the way to a relationship which is built on trust, honesty, and genuine concern. Through such a relationship, we will have achieved one of the most rewarding experiences that man can achieve and will have opened a very important door to personal learning and growth.

D. Alternatives for Student Participation

1. Class discussion - Discussion initiated and led by the teacher in which all students are expected to participate.
 - a. Most appropriate for dealing with specific topics or questions
 - b. Limitations
 - i. Effective with classes of 20 or less
 - ii. Material must be carefully planned
2. Small group discussion - Discussion initiated by the teacher in which small groups (3 or 4) of students deal with a specific issue or question for a short period of time (5 to 10 minutes).
 - a. Most effective in providing an opportunity for all students in a class, regardless of size, to join in discussion
 - b. Limitations - Directions and the topic for discussion must be clear to the students
3. Panel discussion - Discussion involving a selected group of students in front of the class who join after a set period of time.
 - a. Effective in stimulating discussion in larger classes
 - b. Limitation - May become emotional with the focus shifting from the content to the personalities of the speakers
4. Symposium - Discussion by a small group of persons well-informed on various aspects of a particular topic. Symposium members give reports and respond to questions from the class.
 - a. This is an effective alternative for the presentation of specific information

- b. Limitation - Focus may shift from the content to the personalities of the speakers
5. Debate - Pro and con discussion of controversial issue in which speakers attempt to convince the class of their point of view.
 - a. Most effective for dealing with controversial issues with definite sides
 - b. Limitations - Objectivity is often difficult to maintain
 6. Reverse thinking - A technique in which one's thoughts are expressed in reverse, used in combination with other methods.
 - a. To gain insights into other points of view
 - b. Limitation - Can become confusing
 7. Role playing - Selected members of the class acting out a situation or incident.
 - a. Helpful in gaining insight into the dynamics of a situation
 - b. Limitation - Actors can become self-conscious
 8. Brainstorming - A group problem-solving technique based upon creative thinking in a short period of time.
 - a. Effective in generating numerous alternatives
 - b. Rules
 - i. No evaluation of ideas
 - ii. Emphasis on quantity
 - iii. "Crazy" ideas welcome
 - iv. Taking off on others' ideas is encouraged
 - v. One person records ideas
 - c. Limitation - Must be used in conjunction with other methods, will not stand on its own

9. Student led activities - All of the above methods may be led by students with the supervision of the teacher.

E. Group Behaviors

Evaluation Section

Formative Evaluation of Skills of Facilitating Student Participation

Sources of Data for Assessing Teaching Skills

Gathering Data for Assessing Teaching Skills

Weighing the Input

A. Formative evaluation of skills of facilitating student participation

1. Purpose - to provide direction for teaching improvement efforts.

2. Factors for consideration.

a. Communication skills

i. Expression - skill in using verbal and non-verbal techniques to increase the power and meaning of communications

ii. Feedback - skills in soliciting and giving effective feedback to students

b. Organization skills

i. Introduction - skill in presenting and giving clear, concise directions for an activity

ii. Objectives - skill in preparing reasonable clear objectives for learning activities

iii. Closure - skills in integrating major points of a learning activity and establishing links between the new and old material

c. Group skills

i. Task - skills in maintaining the progress of a group toward its objectives

ii. Building and Maintenance - skills in building and maintaining an effective group

B. Sources of data for assessing teaching skills

1. Students

a. Written

b. Oral

2. Observer

- a. Instructional specialist
 - b. Colleague
 - c. Students
3. Media
- a. Videotape
 - b. Audiotape
4. Self - Always used as a data source.
- C. Gathering data for assessing teaching skills
1. Open-ended questions - Allowing the observers to respond as they see fit, i.e. What does the teacher do to help you participate in class activities?
 2. Value decision questions - Forcing the observer to make a value decision about performance of a particular skill, i.e. The instructor's ability to get students to participate in class discussions. Responses: (1) No improvement is needed; (2) Little improvement is needed; (3) Improvement is needed; (4) Considerable improvement is needed; (5) Not a necessary skill or behavior for this course (TABS item #15).
 3. Frequency questions - Asking for the frequency of performance of a particular behavior, i.e. The instructor gets me to participate in class discussions. Responses: (1) Always; (2) Frequently; (3) Sometimes; (4) Never.
- D. Weighing the input - When deciding on whether or not a particular skill or aspect of a skill is in need of improvement it is necessary to consider all of the data available (including self reported data) in light of several factors.
1. Goals of instruction - Are your goals for instruction

reasonable and an appropriate level of challenge for the students?

2. Instructional activities - Are the activities appropriate for reaching your goals? What other activities would accomplish your goals?
3. Students' skills - To what extent do you need to work with the students to improve their skills?
4. Commitment - How much of a commitment are you willing to make to improve your teaching?

Exercise Section

Communication of Student Roles

General Discussion

Problem-Solving Groups

Small Group Discussion

Symposium Discussion

Goal

The purpose of this exercise is to make explicit to the students what types of behaviors are expected of them in the classroom.

Group Size

This exercise may be used with any size class.

Time Requirement

This exercise requires approximately 10 - 20 minutes of class time.

Preparation

Preparation for this exercise is most important. The first step is an examination of exactly what you expect students to do in the classroom.

Make a list of what you would like students to do in the classroom. Consider - Do you want students to ask questions? If so, what kind of questions (clarity, challenging, application, etc.)? How much time do you want to devote to student participation?

Now review your list and ask yourself what the benefits are of these behaviors ... to you ... to the student. If any items on your list seem inappropriate cross them off.

Now make a list of behaviors that you feel that students will want to do in the classroom. Consider these in terms of their benefit to students ... their benefit to you. Check off the behaviors that you consider inappropriate. Consider why they are inappropriate. Add to your first list any behaviors that you feel you can accommodate.

Review your list again this time considering whether or not these expectations are realistic. Drop any items that are not realistic.

Class Activity

Introduction

At the start of a class session, as early in the semester as possible, explain what you expect students to do in the classroom and your rationale for your expectations. Following this explanation, ask the students for their reactions to these expectations. You should be prepared to respond to a variety of reactions. At the end of this discussion, summarize your expectations.

Procedure

At the beginning of a class, stress the behaviors that you think will be most productive for that particular class session. This will also serve as a reminder of what you expect students to do.

During class sessions, reinforce students for acting in the ways you have encouraged. The frequency of reinforcement may be diminished as students exhibit the behaviors more frequently. The reinforcement should not be discontinued.

Feedback

Feedback about your expectations should be sought at several points.

The first time this feedback should be sought is when your expectations are introduced. At this time you should ask students whether or not they feel the expectations are reasonable in light of your objectives and their objectives for the course. Also, you should ask what you can do to help the students meet your expectations.

Several weeks after the introduction of your expectations,

ask the students to write the answers to the following questions:⁹¹

1) What are students expected to do in this classroom? 2) Do these expectations aid or hinder your learning in this course? In what ways? 3) What could you do in the classroom to improve your learning in this course? The responses to these questions should be anonymous.

When reviewing responses to these questions, consider how appropriate your expectations are. Consider what adjustments may be necessary.

Summarize the results for the class as soon as possible. At the same time discuss any changes in your expectations. (If this is the case, gather written feedback in the manner described above.)

Goals

The process of class discussion is useful in accomplishing a number of goals. These goals, compiled by McKeachie, 1969, are:

- to make use of the resources of class members;
- to obtain feedback on how well instructional objectives are being met;
- to give students an opportunity to practice thinking in terms of the subject matter;
- to provide students with feedback about their logic and position;
- to help students in processing information presented in course materials;
- to counter student dissonance regarding course materials;
- to foster student motivation for learning the course material.

Group Size

This exercise is designed to be used in classes of up to twenty-five students.

Time Requirement

Approximately ten minutes of in-class preparation time will be necessary in addition to one entire (50 minutes) class session for the exercise itself.

Preparation

Instructor

In preparation for this exercise, you should first decide upon the goals for the discussion. Two or three of the process goals presented at the beginning of this exercise should be chosen as the focus of the discussion. With them in mind, decide upon the content of the discussion. The content must be broad enough

to support a discussion at the same time being narrow enough to be manageable.

Review the materials for discussion and anticipate questions and/or comments by students. Review your position on the material and your response to anticipated questions and/or comments.

Students

Approximately one week before the discussion is to take place, tell the students about it. Tell them what materials will be covered and the scope of the discussion. Tell them what they will be expected to do.

They will be expected to formulate questions or comments on the material. They will be expected to ask and respond to questions or comments by members of the class. Give examples of what you anticipate to be brought up in the discussion. Tell the students what you expect to do in the discussion. You will be primarily a facilitator rather than a participant in the discussion.

Tell the students, also, that you are trying out a discussion exercise and will be seeking their feedback about it.

At the end of the class prior to the discussion, briefly restate the assignment as a reminder to the class.

In-Class Activity

Introduction

Introduce the discussion by again briefly restating the assignment and what your and student roles are expected to be.

Procedure

Initiate the discussion by asking for a brief summary of the material. Ask students to offer one summary point each until there is agreement that the summary is complete. (If there are no immediate volunteers, tell the students that all will be asked to participate and begin by asking an individual student to offer a summary point.)

Note: You should have limited input into the content of the summary. This part of the discussion should be limited to 5 - 7 minutes.

When there is agreement that the summary is complete, restate the summary points (making a list will help), and ask students for their questions or comments about the material. Ask members of the class to respond to a question or comment. (It may be necessary to restate the questions or comments to insure common understanding.) When a question or comment has been exhausted or concensus reached, move on to another question or comment.

Repeat this procedure until all of the questions or comments have been dealt with; or until there is only 10 minutes remaining in the class session.

During the discussion resist the temptation of becoming a participant. Encourage students by reinforcing their participation. Refocus the discussion if it is not progressing or is going off on a tangent. Participate only as a last resort; the students are the primary source of this discussion.

Summary

With ten minutes remaining in the class session, cut off the discussion so that you may summarize and spend a short time on feedback. In a five minute (approximately) summary, restate the major issues, questions, and/or conclusions. Include any unresolved issues. During the summary you may put the topic of discussion into perspective if appropriate. Sources for follow-up may be suggested.

Feedback

Spend the final five minutes of class on obtaining feedback about the discussion. Ask the students to respond in writing to several questions. First, did the discussion meet the content objectives you set (list the objectives)? Second, what did the students feel were the strengths and weaknesses of the process of discussion (as opposed to lecture, for example)? And third, what was their reaction to the discussion?

Use the answers to these questions as a basis for checking your perceptions of the exercise.

You should anticipate that the students would like you to report a summary of the answers. This summary should be made as soon after the discussion as possible.

Goals

The purpose of this exercise is to provide a situation in which students can develop their problem solving skills.

Group Size

This exercise is designed to be used in classes of up to 40 students.

Time Requirement

Approximately 30 minutes are necessary for this exercise. (It will vary greatly depending on the type of problem.)

Preparation

Instructor

One of the most important factors in this exercise is the clarity of your instructions to the class. After reading through this exercise, prepare a clear statement of the problem and clear objectives for the groups.

Students

The students must have sufficient information and basic skills to deal with the problem. There should be little extra preparation for this exercise.

In Class Activity

Introduction

Begin by telling the students that you are trying out a problem solving exercise and will want some feedback about it at the end.

Ask the students to break up into groups of four. Have

each group choose a leader whose job it is to maintain the focus of the discussion towards a solution of the problem, and to record and report for the group.

When each group has a leader and all understand the leader's task, state the problem and the objectives for the groups. (A specific approach for solving the problem should be suggested if not inherent to the problem.) When the students are clear on the problem and their objectives, ask them to spend a specific amount of time working on it.

Procedure

While the students are working in their groups, circulate among them, listening in for short periods. Your comments should be minimal.

At the end of the allotted time, call for the attention of the class. Ask group leaders to report to the class. All groups should report unless there is agreement among groups. Your comments should be limited to clarity questions at this stage.

Summary and Instructor Feedback

Summarize the reports in a general manner, focusing on the entire class rather than specific groups. Following the summary offer constructive feedback which includes both the outstanding strong and weak points. Comments about weak points should include suggestions for remediation.

Student Feedback

With several minutes ask the students to respond in writing to two questions. First, Was the group effective in its dealing with the problem? If not, why? And second, What

were the strengths and weaknesses of the group?

Use the answers to these questions as a basis for checking your perceptions of the exercise.

You should anticipate that the students would like you to report a summary of the answers. This report should be made as soon after the exercise as possible.

Goals

The purpose of this exercise is to provide a situation in which all students in a class, regardless of size, may participate in a class discussion.

Other goals are generally the same as those listed in the General Discussion Exercise.

Group Size

This exercise may be used with any size class.

Time Requirements

Approximately 25 minutes are necessary for this exercise.

Preparation

One of the most important factors in this exercise is the clarity of your instructions to the students.

After reading through this exercise, review your notes for an upcoming class session. Choose a topic for discussion that will be specific enough to permit a focused discussion while at the same time general enough to allow for some discussion. A controversial question is probably most effective. Prepare a clear statement of the issue.

In-Class Activity

Introduction

Once the material has been covered in your lecture, you may begin the exercise. Tell the students that you are going to try out a discussion exercise and would like some feedback about it at the end.

Tell the students to break into groups of three or four.

Tell them to discuss the issue that you have chosen for five to ten minutes. When you are satisfied that the students understand what they are supposed to do, let the discussion begin.

Procedure

When the allotted time has passed, call for the attention of the students. Ask for brief summaries from several groups. Spend approximately five minutes on this reporting. Following this, give a brief summary of main points, new questions raised, etc. Give the class as a whole constructive feedback on their discussion.

Feedback

With several minutes left in the class session, ask the students to list what they liked and disliked about the discussion. Use the answers as a basis for checking your perceptions of the exercise.

Goals

The purpose of this exercise is to provide a situation in which students in a large lecture class may participate in a discussion.

Class Size

This exercise is designed for use in classes of 40 or more students.

Time Requirement

This exercise will require approximately 10 minutes of class time prior to the discussion, and a 50 minute class session for the discussion.

Preparation

Instructor

Begin preparation for this exercise by choosing a topic for the discussion. It should be one that has several different aspects or points of view. A controversial issue will serve well. Prepare a concise statement of the issue, question, or topic. In addition, summarize the various aspects and/or points of view. This should be mimeographed if possible.

In choosing the date for the exercise, consider that it should take place in close proximity to treatment of the topic in your lecture. The following class or one after it are best. But also consider that the students will need some time to prepare.

On the day that you cover the material in class, use the last 10 minutes giving instructions for the discussion. Distribute the mimeographed sheets and tell the students to

read over them quickly. Then tell the students that you would like to have a panel discussion on that particular topic and need some students to make up the panel. The panel should be made up of 5 - 8 students. (You should also tell students that panel members will not need to do much additional preparation.) When you have the panel set, explain to the class how the discussion will proceed, stressing that they need to review the material also. Check to be sure that all understand what is to take place.

Meet for a short time after class with the members of the panel. Tell them that they need to be prepared to represent the point of view or aspect of the topic. They should be familiar with relevant course related material and suggest one or two outside resources for them to use. Make sure that each member knows what they are to do.

Students

Members of the panel should be familiar with relevant course related material. They should be familiar with the entire topic, not only with their particular aspect. It is not necessary for them to agree with the position, the emphasis is on representing it. Each member should prepare a brief (2 to 3 minutes) statement of their position.

Other members of the class should also be familiar with relevant course material.

In-Class Activity

Introduction

Begin the class by reviewing the topic and the procedure

for the discussion. Emphasize that your role is that of monitor.

Procedure

Introduce each panel member and then have one member give his or her prepared statement. Proceed until all members make their statements.

Following the statements, open the discussion up to the class. Questions or comments may be addressed to either an individual panel member or to the entire panel. Making sure the question is clear, direct it to appropriate members of the panel. Members of the panel may react to each other's answers or comments at this time, but you should actively moderate at this time.

Feedback

With five minutes remaining in the class session, cut off the discussion and briefly (one minute) give your feelings about it. Then ask the students to write the answers to two questions and leave them as they leave. First, What did you like and/or dislike about this discussion? And, second, What did you gain from the discussion?

Use the answers to these questions as a basis for comparing your reactions to the discussion. Give the class a brief summary of their responses as soon as possible.

Meet briefly with the members of the panel giving them constructive feedback on their performance as a group. Also ask them how it was to be a member of the panel.

310 Elm St.
Northampton, Ma. 01060
January 10, 1977

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Mr. Chris Daggett, Director
Instructional Development Service Project
MacDonald Chemistry Building
McGill University
Montreal, Quebec H3C 3G1
Canada

Dear Chris:

I would like to begin by thanking you for taking the time to read and evaluate this booklet.

I have put the booklet together as a part of my dissertation project. The goal of using the booklet is to increase an instructor's understanding of and skill in facilitating productive student participation in the classroom. It is divided into three sections, one each on explication, exercises, and evaluation. The goal of the explication section is to provide useful information about some important factors involved in facilitating student participation. The exercise section is intended to provide structured exercises which will help to develop skills for facilitating student participation. And the evaluation section is intended to provide information through which an instructor may evaluate his/her skills in facilitating student participation.

My first purpose for your evaluation is to gather comments and reactions about the booklet from several experts whose work focuses specifically on teaching skills of post-secondary instructors. Secondly, I hope to collect data regarding several characteristics of the booklet and of its sections. Those characteristics are: the clarity of the organization and presentation of material; its comprehensiveness of treatment of major aspects of facilitating student participation; its applicability to a variety of faculty in post-secondary institutions; and the coherence of the organization and presentation of material. Revisions based upon your evaluation will be made prior to testing the booklet with faculty.

What I would like you to do is:

- 1) Read the entire booklet and complete the overall evaluation; and
- 2) Re-read the booklet, section by section, writing comments in the margin and completing the respective evaluation forms.

Please return the booklet and evaluation forms in the envelope provided.

Mr. Chris Daggett
January 10, 1977

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If you have any questions please call me collect at 413/586-3965
any evening. Again, I greatly appreciate your time and effort.
If I can return the favor, please let me know how.

Yours,

Dan McCarthy

DM/blh

APPENDIX D
PHASE I DEVELOPMENT AND
SUBSTANTIVE REVIEW MATERIALS

Draft

Developing Teaching Skills:
Facilitating Student Participation

Daniel P. McCarthy
University of Massachusetts/Amherst
January, 1977

Overview and Introduction

Explication Section

The Function of Roles in the Classroom

Communication in the Classroom

Characteristics of Constructive Feedback

Alternatives for Student Participation

Group Behaviors

Exercise Section

Communication of Student Roles

General Discussion

Problem Solving Groups

Small Group Discussion

Panel Discussion

Evaluation Section

Formative Evaluation of Skills for Facilitating Student Participation

Sources of Data

Gathering Data

Analyzing Data

OVERVIEW AND INTRODUCTION

Why Student Participation

One may ask why students should participate in classroom activities. There are a number of benefits for both instructor and students. In some cases these benefits can be the difference between a productive and unproductive educational experience for either the instructor or the students.

A primary benefit is in the enhancement of learning. Several studies () have shown that students who have the opportunity to practice and recite what they are learning show greater gains than those who do not have those opportunities. Students who participate in classroom activities also get feedback about their efforts; another important factor is the enhancement of learning. A classroom in which students may participate also provides necessary opportunities for those students who learn more effectively when they are actively involved in their educational experiences.

An important benefit for an instructor is that student participation in the classroom is a valuable source of feedback about one's teaching effectiveness. This feedback lets the instructor know how well the students are learning the material being presented. Student participation is also a source of variety in the classroom and an often welcome change from lecture. Students are also a source of the energy that is needed by instructors from time to time.

Objectives and Intended Use

This booklet, however, does not focus on the whys, it attempts to deal with the hows. The goal of using it is to increase one's

understanding of and skill in facilitating productive student participation in the classroom. The booklet is divided into three sections.

The explication section is intended to provide information about some important factors involved in facilitating student participation in the classroom. It also reviews some forms of student participation. The concepts introduced in the explication section are the basis for the exercise section; it is, therefore, most important that it be read before trying out any of the exercises.

The goal of the exercise section is to provide structured exercises which will help to develop skills for facilitating student participation. The exercises may be repeated at any appropriate time, and it is hoped that they will be used from time to time.

The intention of the evaluation section is to provide information through which an instructor may evaluate his/her skills in facilitating student participation. This evaluation may be done at any time, but it is intended that an instructor will evaluate his/her skills following the use of the other sections.

The booklet was designed for post-secondary instructors who meet with their classes once a week throughout a semester or an equivalent time. It is expected that class planning time will increase by approximately 30 minutes per week while using the booklet. Processing/reviewing time is also expected to increase by approximately 30 minutes per week. This additional time should diminish as skills develop.

Please Rate:

I. Organization of materials

A. 1 2 3 4 5
 clear _____ unclear

B. 1 2 3 4 5
 coherent _____ incoherent

Comments:

II. Presentation of materials

A. 1 2 3 4 5
 clear _____ unclear

B. 1 2 3 4 5
 coherent _____ incoherent

Comments:

III. Objective: to introduce the booklet

1 2 3 4 5
 successful _____ unsuccessful

Comments:

IV. Objective: to provide an overview of the booklet

1 2 3 4 5
 successful _____ unsuccessful

Comments:

Other Comments:

EXPLICATION SECTION

(The following was adapted from Katz, D. and Kahn, R. The Social Psychology of Organizations New York: John Wiley & Sons, Inc., 1966)

When considering the classroom it is obvious that those involved function in various roles. Students act like students, and teachers act like teachers. Their behavior is determined by their role. Role behavior refers to the recurring actions of an individual, appropriately interrelated with the respective activities of others so as to yield a predictable outcome. In the classroom the outcome is learning.

A common problem with classroom roles is that there is often little direct communication or consensus on teacher and student roles. Teachers and students seldom communicate explicitly on each other's role behavior. They do, however, have role expectations for one another.

These expectations are the prescriptions and proscriptions of attitudes about what a person should and should not do as a part of their role. Again the problems arise in the classroom when these expectations are not made explicit.

The communication of role expectations take place in two basic ways. First, there are direct instructions, typically, by the teacher. A syllabus or laboratory manual is often the source of these instructions. And second, and generally more powerful, are actions in the classroom that attempt to influence the students' or the teacher's behavior. It is important to note that this is not a one-way process. Students and teachers influence each other. However, it is the teacher who is in the more influential position in the classroom.

It is the teacher who has the power to determine the consequences of compliance or non-compliance of role expectations. It is the teacher who assigns grades. There are strong consequences for the students to meet the

expectations of the teacher.

In addition to the "sent" role there is a "received" role; that is a person's perceptions and cognitions of the sent role. While it is the "sent" role by which the teacher communicates what is expected of students; it is the "received" role which is the immediate influence on student behavior and the immediate source of motivation for performance of the student's role. Each expectation will arouse motivation of some magnitude and direction. The magnitude and direction are not necessarily that which was intended by the teacher.

Sent expectations that are viewed by the students as illegitimate or coercive often arouse strong resistance which leads to outcomes different from or opposite to the expected behavior. These expectations only partially determine the behavior of students in the classroom. There are a variety of other psychological forces which influence student motivation.

An important source of student motivation is the intrinsic satisfaction of performing well. This motivation increases when the student has a major part in determining his/her responsibilities in the classroom.

Another factor influencing student behavior is their student self-identity. That is, their expectations based upon socialization and prior training about their own behavior and abilities in the classroom. They tend to behave in ways that enhance their valued attributes of their student self-identity.

One of the more important concepts in the consideration of roles in the classroom is that of role conflict; the simultaneous occurrence of two or more sendings such that compliance with one would make more difficult compliance with the other.

Several types of role conflict have been identified. One type is intrasender, which occurs when expectations of the teacher are incompatible.

A second type of role conflict is called intersender and occurs when expectations of one teacher are in conflict with another. A third type of conflict may be called interrole, occurring whenever the sent expectations for one role are in conflict with those for another role played by the same student. The fourth type is called person-role conflict - conflict which occurs when role requirements violate the needs, values, or capacities of the student.

A combination of the basic types of conflict sometimes occurs. A prevalent form is role overload. This occurs when expectations of various role senders are legitimate and are not logically incompatible; however, the student finds that he/she cannot complete all of the tasks urged by various people within the stipulated time limits and requirements of quality. One is likely to experience overload as conflict of priorities or as a conflict between quantity and quality. One must decide what to comply with and what to put off. When it is impossible to deny any of the pressures, a person may be taxed beyond the limit of abilities.

It is important that a teacher consider role sending, the received role, and role conflict when designing and evaluating instructional activities. These factors have a good deal of influence on the success or failure of these activities.

Communication in the Classroom

(The following was adapted from Combs, A., Avila, D., and Parkey, W., Helping Relationships: Basic Concepts for the Helping Professions, Boston: Allyn and Bacon, Inc., 1971.)

Communication is probably the single most important process of occurring in the classroom. It comes before learning. In many ways learning is dependent upon communication. True communication, whether inside the classroom or out, is a function of common meaning. It is the overlapping of the perceptual fields of the communicator and communicatee. It is important to note, when considering the classroom, that communicator is not exclusively the role of the teacher. Communication is a matter of understanding and being understood.

A basic problem in communication is the fact that what is communicated is not what is intended but rather what is comprehended. It is common for a teacher to assume that they have communicated something because they intended to do so. The comprehension of students (or any communicatee) is mediated by the difference in the content of the meaning of words and in the emotional impact of those words.

The difference in the meaning of words often creates what is called "incidental" learnings. (These "incidental" meanings often are more significant than the words themselves.) They are due to lack of agreement on common meanings.

Words, however, are not the only vehicle for communication. A good deal of the information we take in is based upon non-verbal communication. In the classroom the beliefs of the teacher and the students are conveyed despite the words used.

(Teachers commonly act out what they really mean.) These cues are

often congruent with what the teacher says, but unfortunately this is not always the case. It is through these incongruent non-verbal cues that "hidden curricula" are conveyed.

Communication is always a process of interaction. When this process breaks down in the classroom, the responsibility must lie with the participant in the helping role. The helper in this case is the teacher. In general, responsibility for communication lies always with the communicator, not the communicatee.

Effective communication is related to some need. As we function we perceive events that we need to perceive. People take in the information they need to absorb; the rest is likely to leave them unmoved, if they perceive it at all. This creates enormous problems for teachers. In many classroom situations a teacher's success is dependent upon their ability to create a need.

The creation of need in students may take place in several ways. Need may be created by connecting links to experience even before information is provided. Need is created when students are involved in planning their own educational experiences. Need may also be created by providing opportunities for self-direction. Again it is important to note that need does not exist because it is intended by the teacher; it must be perceived by the students.

There are immediate needs that must be met if effective communication and real learning is to take place. Progress toward the attainment of a major goal will be maintained if the process of attainment, in this case classroom communication, is enhancing and reinforcing. The immediate need is for enhancement and reinforcement.

Students must be ready to absorb the information presented in the

classroom. It must have meaning to them. It is as students discover the relationship of new experience to that which is already in existence that the new experience can be comprehended. It is in this way that new experience is given meaning.

When new ideas cannot be brought into harmony with those already present they are very difficult to absorb. This phenomenon is known as cognitive dissonance. The information that does not fit with what is already there is likely to be rejected if it is apprehended at all.

Simplicity has great value in effective communication. Simple material is more likely to be comprehended by students. The simplicity must be decided by the student. What is simple to a scholar in a field is not necessarily simple to a student, relatively new to that field. A teacher who really wants to communicate does not regard simplicity as unscholarly, he/she uses it to make communication more successful.

Speed and pacing of communication must be related to the rate of comprehension. Time must be spent in making certain that meanings are conveyed. There is little point to presenting material that students do not understand. "Covering the material" is often accomplished by the teacher without the students; they "drop out" when they don't understand.

A major factor in the success of communication is the condition of the receiver. Psychological barriers are established in response to threats to a person's security or self-esteem. These barriers feed into a threat-counter-threat spiral which has the potential to destroy any dialogue. A combination of strategies is necessary to overcome these barriers.

First, attention should be paid to the feelings involved in the process of dialogue. The teacher must become concerned with the feeling. Second,

feelings of threat should be absorbed or drained off. The teacher must find ways to respond with less threat than they receive. Third, the teacher should contribute to the personal feelings of security in students. People who have positive feelings of self need less self-defense. Fourth, the interchange should be adjusted to the tolerance levels of the teacher and students. When establishing communication the teacher should consciously arrange for as little inflexibility as possible. And, fifth, the teacher should recognize individual differences among students and him/herself. Being accepting of differences does not necessarily mean approving. Students are more likely to communicate in situations that they are free to be themselves.

The reduction of threat in these ways has widespread implications in the classroom. The effects of threat carry beyond the original confrontation, the failures in communication they produce may continue for an entire semester even after the causes of the hostilities have disappeared.

At the beginning of a course a teacher has unearned authority (unearned in that it was not given to the teacher by this new class of students). Most people find this type of authority threatening. As the term progresses and experience increases, the unearned authority becomes positive or negative earned authority. When it becomes positive earned authority, communication is increased immensely, often to the point that some of the usual aids to communication are no longer necessary.

Given that communication is an interactive process, an important aspect of effective communication is listening. Teachers must know how to listen. Effective listening includes attending to verbal and non-verbal expressions and acquisition of listening skills requires conscious effort.

The payoff, however, is well worth the effort. Students are more likely to communicate with a teacher who listens to what they have to say.

Characteristics of Constructive Feedback

(The following was adapted from Bergquist, W. and Phillips, S., A Handbook for Faculty Development, Washington, D.C.: The Council for the Advancement of Small Colleges, 1975.)

As students become more active participants in classroom activities, their need for constructive feedback about their participation increases. Feedback is an important part of any learning activity. These characteristics should be observed when giving students feedback about their behavior in the classroom.

1. It is specific rather than general. To be told that one is "dominating" will probably not be as useful as to be told that "in the conversation that just took place, you did not appear to be listening to what others were saying, and I felt forced to accept your arguments."
2. It is focused on behavior rather than on the person. It is important that we refer to what a person does rather than to what we think or imagine he is. Thus we might say that a person "talked more than anyone else in this meeting" rather than that he is a "loud-mouth." The former allows for the possibility of change; the latter implies a fixed personality trait.
3. It takes into account the needs of both the receiver and giver of feedback. Feedback can be destructive when it serves only our own needs and fails to consider the needs of the person on the receiving end. It should be given to help, not to hurt. We too often give feedback because it makes us feel better or gives us a psychological advantage.
4. It is directed toward behavior which the receiver can do something about. Frustration is only increased when a person is reminded of some shortcoming

over which he has no control.

5. It is well-timed. In general, feedback is most useful at the earliest opportunity after the given behavior (depending, of course, on the person's readiness to hear it, support available from others, and so forth). The reception and use of feedback involves many possible emotional reactions. Excellent feedback presented at an inappropriate time may do more harm than good.
6. It involves sharing of information, rather than giving advice. By sharing information, we leave a person free to decide for himself, in accordance with his own goals and needs. When we give advice we tell him what to do, and to some degree take away his freedom to decide for himself.
7. It involves the amount of information the receiver can use rather than the amount we would like to give. To overload a person with feedback is to reduce the possibility that he may be able to use what he receives effectively. When we give more than can be used, we are more often than not satisfying some need of our own rather than helping the other person.
8. It concerns what is said and done, or how, not why. The "why" takes us from the observable to the inferred and involves assumptions regarding motive or intent. Telling a person what his motivations or intentions are more often than not tends to alienate the person and contributes to a climate of resentment, suspicion, and distrust; it does not contribute to learning or development. It is dangerous to assume that we know why a person says or does something, or what he "really" means, or what he is "really" trying to accomplish. If we are uncertain of his motives

or intent, this uncertainty itself is feedback, however, and should be revealed.

9. It is checked to insure clear communication. One way of doing this is to have the receiver try to rephrase the feedback he has received to see if it corresponds to what the sender had in mind. No matter what the intent, feedback is often threatening and thus subject to considerable distortion or misinterpretation.
10. It is followed by attention to the consequences of the feedback. The person who is giving feedback may greatly improve his helping skills by becoming acutely aware of the effects of his feedback. He can also be of continuing help to the recipient of the feedback.
11. It is an important step toward authenticity. Constructive feedback opens the way to a relationship which is built on trust, honesty, and genuine concern. Through such a relationship, we will have achieved one of the most rewarding experiences that man can achieve and will have opened a very important door to personal learning and growth.

Alternatives for Student Participation

The following is a list of commonly used teaching methods based on student participation.

1. Class Discussion

Class discussions are initiated and led by the teacher. He/she exercises a good deal of control over the direction of the discussion. All students are expected to participate and often are asked to contribute in turn, in order to begin the discussion. It is most appropriate for dealing with specific topics or questions.

A major limitation of this method is that it is effective in classes of twenty students or less. The material for the discussion must be carefully planned to allow for some clear focus.

2. Small Group Discussion

Small group discussions are initiated by the teacher and are conducted by small groups (three or four) of students. They deal with a specific issue or question for a short period of time (five to ten minutes). These discussions are most appropriate for dealing with very specific topics or questions.

Small group discussions are effective when the directions and the topic for discussion is clear to the students.

3. Panel Discussion

This method involves a selected group of students who discuss an issue in front of the entire class. The class joins in the discussion after a set period of time. It is an effective way of stimulating discussion in larger classes.

This type of discussion may become emotional and the focus shifting from the content to the personalities of the panel members.

4. Symposium

This method involves a small group of persons who are well informed on various aspects of a particular topic. The members of the symposium give reports and respond to questions from the entire class. This is an effective alternative for presenting specific information.

Like a panel discussion, the focus may shift from the content to the personalities of the speakers.

5. Debate

This is a pro-con discussion of controversial issues. The speakers attempt to convince the class of their point of view. It is most effective in dealing with issues with definitive sides.

A problem with debate is that objectivity is often difficult to maintain.

6. Reverse Thinking

In this technique students are asked to express their thoughts in reverse. It must be used in combination with other discussion methods. Reverse thinking helps students to gain insights into other points of view. It can, however, become confusing.

7. Role Playing

This involves selected members of the class acting out a situation or incident. It is particularly helpful in gaining insight into the dynamics of a situation. A limitation of this technique is that the actors may become self-conscious.

8. Brainstorming

This is a group problem-solving technique based upon creative thinking in a short period of time (five minutes). It is effective in generating numerous alternative solutions. The rules are: 1) the emphasis is on quantity, the more ideas, the better; 2) there is no evaluation of ideas,

that can be done later; 3) offbeat ideas are welcome; and 4) taking off on others' ideas is encouraged. One member of the class records the ideas. 127

Brainstorming must be used in conjunction with other discussion methods. It will not stand on its own.

9. Student-led Activities

All of the above methods may be led by students with the supervision of the teacher.

Group Behaviors

(The following was adapted from Bradford, L.P. (ed.). Group Development. Washington, D.C.: NTL, 1961.)

As students participate in activities, the classroom takes on the characteristics of a group situation. When students in a classroom have a common task or problem to solve they become members of a working group. Typically the instructor is the leader of such a group; although, in many classroom activities there are student leaders.

In most successful group situations, two types of needs must be met. First, the group must progress towards a solution to its problem (task behavior). And second, the group feeling must be strengthened and maintained (maintenance behavior).

Task Behaviors - involving the selection and completion of a group task:

Initiating Activity - defining the task, proposing solutions, suggesting approaches to the task, organizing the material

Seeking Information - asking for clarification of suggestions, requesting information

Seeking Opinions - seeking expression of opinion about something, seeking clarification of values, suggestions, or ideas

Giving Information - offering facts or generalizations, relating experience to the problem

Giving Opinion - stating beliefs concerning an idea, value or question

Elaborating - clarifying, offering examples, developing meaning, projecting on the adoption of a proposal

Coordinating - pointing out relationships among ideas or suggestions, pulling ideas and/or suggestions together, drawing together activities of sub-groups or members

Summarizing - pulling related ideas or suggestions together, restating suggestions following discussion

Evaluating - submitting decisions or accomplishments for comparison to group standards, comparing accomplishments to goals

Diagnosing - determining sources of difficulties, determining next steps, analyzing blocks to progress

Testing for Concensus - checking on group opinions, checking on whether the group is nearing concensus

Maintenance Behaviors - involves building and maintaining group activity:

Encouraging - being friendly, warm, responsive to others, praising, agreeing, accepting contributions of others

Gate-keeping - facilitating contributions of other group members

Standard Setting - expressing group standards of procedure or evaluation, restating standards

Following - going along with group decisions, accepting ideas of others

Expressing Group Feelings - summarizing understanding of group feeling, describing reactions of the group

Mediating - harmonizing, conciliating differences, offering compromise solutions

Relieving Tension - easing tension through humor, providing perspective for a tense situation

Disfunctional Behaviors - involves actions that do not help and often hinder the function of a group:

Being Aggressive - criticizing or blaming others, showing hostility toward the group or its members, deflating the ego or status of others

Blocking - interfering with the progress of the group, going off on a tangent, citing unrelated personal experience, arguing too much, rejecting ideas without consideration

Self-Confessing - using the group as a sounding board, expressing non-group-oriented feelings or points of view

Competing - vying with other group members

Seeking Sympathy - trying to induce group members to be sympathetic to one's problems, disparaging one's own ideas

Horsing Around - clowning, joking, disrupting group work

Seeking Recognition - attempting to call attention to one's self

Withdrawal - acting indifferent or passive, daydreaming, whispering to others, wandering from the subject

It is important to note that disfunctional behavior is an indication that the group activity is not satisfying individual needs. Group members should be alert to the fact that individuals are likely to interpret behavior differently and should resist the tendency to blame any member who exhibits disfunctional behavior.

Improving Member Roles - a group will be more efficient if its members work toward improving their roles by:

becoming aware of necessary behavior;

becoming more aware of the degree to which they contribute

to the group through their behavior;

working at improving skill in performing group behaviors;

reducing the number of unproductive questions; and

reducing the amount of unnecessary verbiage.

Please Rate:

I. Organization of materials

A. 1 2 3 4 5
 clear _____ unclear

B. 1 2 3 4 5
 coherent _____ incoherent

Comments:

II. Development of materials

A. 1 2 3 4 5
 clear _____ unclear

B. 1 2 3 4 5
 applicable _____ not applicable

C. 1 2 3 4 5
 accurate _____ inaccurate

Comments:

III. Presentation of materials

A. 1 2 3 4 5
 clear _____ unclear

B. 1 2 3 4 5
 appealing _____ not appealing

Comments:

Please Predict

IV. Objective: to increase understanding of some important
 factors involved in facilitating student participation

1 2 3 4 5
 successful _____ unsuccessful

IV. (continued)

Comments:

Other Comments

EXERCISE SECTION

Goal

The purpose of this exercise is to make explicit to the students what types of behaviors are expected of them in the classroom.

Group Size

This exercise may be used with any size class.

Time Requirement

This exercise requires approximately 10 - 20 minutes of class time.

Preparation

Preparation for this exercise is most important. The first step is an examination of exactly what you expect students to do in the classroom.

Make a list of what you would like students to do in the classroom. Consider - Do you want students to ask questions? If so, what kind of questions (clarity, challenging, application, etc.)? How much time do you want to devote to student participation?

Now review your list and ask yourself what the benefits are of these behaviors ... to you ... to the student. If any items on your list seem inappropriate cross them off.

Now make a list of behaviors that you feel that students will want to do in the classroom. Consider these in terms of their benefit to students ... their benefit to you. Check off the behaviors that you consider inappropriate. Consider why they are inappropriate. Add to your first list any behaviors that you feel you can accommodate.

Review your list again this time considering whether or not these expectations are realistic. Drop any items that are not realistic.

Class Activity

Introduction

At the start of a class session, as early in the semester as possible, explain what you expect students to do in the classroom and your rationale for your expectations. Following this explanation, ask the students for their reactions to these expectations. You should be prepared to respond to a variety of reactions. At the end of this discussion, summarize your expectations.

Procedure

At the beginning of a class, stress the behaviors that you think will be most productive for that particular class session. This will also serve as a reminder of what you expect students to do.

During class sessions, reinforce students for acting in the ways you have encouraged. The frequency of reinforcement may be diminished as students exhibit the behaviors more frequently. The reinforcement should not be discontinued.

Feedback

Feedback about your expectations should be sought at several points.

The first time this feedback should be sought is when your expectations are introduced. At this time you should ask students whether or not they feel the expectations are reasonable in light of your objectives and their objectives for the course. Also, you should ask what you can do to help the students meet your expectations.

Several weeks after the introduction of your expectations,

ask the students to write the answers to the following questions:

1) What are students expected to do in this classroom? 2) Do these expectations aid or hinder your learning in this course? In what ways? 3) What could you do in the classroom to improve your learning in this course? The responses to these questions should be anonymous.

When reviewing responses to these questions, consider how appropriate your expectations are. Consider what adjustments may be necessary.

Summarize the results for the class as soon as possible. At the same time discuss any changes in your expectations. (If this is the case, gather written feedback in the manner described above.)

Please Rate:

I. Organization of materials

A. 1 2 3 4 5
clear _____ unclear

B. 1 2 3 4 5
coherent _____ incoherent

Comments:

II. Presentation of instructions

A. 1 2 3 4 5
clear _____ unclear

B. 1 2 3 4 5
appealing _____ not appealing

Comments:

Please Predict

III. Use of this exercise in the classroom

1 2 3 4 5
successful _____ unsuccessful

Comments:

General Discussion Exercise

Goals

The process of class discussion is useful in accomplishing a number of goals. These goals, compiled by McKeachie, 1969, are:

- to make use of the resources of class members;
- to obtain feedback on how well instructional objectives are being met;
- to give students an opportunity to practice thinking in terms of the subject matter;
- to provide students with feedback about their logic and position;
- to help students in processing information presented in course materials;
- to counter student dissonance regarding course materials;
- to foster student motivation for learning the course material.

Group Size

This exercise is designed to be used in classes of up to twenty-five students.

Time Requirement

Approximately ten minutes of in-class preparation time will be necessary in addition to one entire (50 minutes) class session for the exercise itself.

Preparation

Instructor

In preparation for this exercise, you should first decide upon the goals for the discussion. Two or three of the process goals presented at the beginning of this exercise should be chosen as the focus of the discussion. With them in mind, decide upon the content of the discussion. The content must be broad enough

to support a discussion at the same time being narrow enough to be manageable.

Review the materials for discussion and anticipate questions and/or comments by students. Review your position on the material and your response to anticipated questions and/or comments.

Students

Approximately one week before the discussion is to take place, tell the students about it. Tell them what materials will be covered and the scope of the discussion. Tell them what they will be expected to do.

They will be expected to formulate questions or comments on the material. They will be expected to ask and respond to questions or comments by members of the class. Give examples of what you anticipate to be brought up in the discussion. Tell the students what you expect to do in the discussion. You will be primarily a facilitator rather than a participant in the discussion.

Tell the students, also, that you are trying out a discussion exercise and will be seeking their feedback about it.

At the end of the class prior to the discussion, briefly restate the assignment as a reminder to the class.

In-Class Activity

Introduction

Introduce the discussion by again briefly restating the assignment and what your and student roles are expected to be.

Procedure

Initiate the discussion by asking for a brief summary of the material. Ask students to offer one summary point each until there is agreement that the summary is complete. (If there are no immediate volunteers, tell the students that all will be asked to participate and begin by asking an individual student to offer a summary point.)

Note: You should have limited input into the content of the summary. This part of the discussion should be limited to 5 - 7 minutes.

When there is agreement that the summary is complete, restate the summary points (making a list will help), and ask students for their questions or comments about the material. Ask members of the class to respond to a question or comment. (It may be necessary to restate the questions or comments to insure common understanding.) When a question or comment has been exhausted or consensus reached, move on to another question or comment.

Repeat this procedure until all of the questions or comments have been dealt with; or until there is only 10 minutes remaining in the class session.

During the discussion resist the temptation of becoming a participant. Encourage students by reinforcing their participation. Refocus the discussion if it is not progressing or is going off on a tangent. Participate only as a last resort; the students are the primary source of this discussion.

Summary

With ten minutes remaining in the class session, cut off the discussion so that you may summarize and spend a short time on feedback. In a five minute (approximately) summary, restate the major issues, questions, and/or conclusions. Include any unresolved issues. During the summary you may put the topic of discussion into perspective if appropriate. Sources for follow-up may be suggested.

Feedback

Spend the final five minutes of class on obtaining feedback about the discussion. Ask the students to respond in writing to several questions. First, did the discussion meet the content objectives you set (list the objectives)? Second, what did the students feel were the strengths and weaknesses of the process of discussion (as opposed to lecture, for example)? And third, what was their reaction to the discussion?

Use the answers to these questions as a basis for checking your perceptions of the exercise.

You should anticipate that the students would like you to report a summary of the answers. This summary should be made as soon after the discussion as possible.

Goals

The purpose of this exercise is to provide a situation in which students can develop their problem solving skills.

Group Size

This exercise is designed to be used in classes of up to 40 students.

Time Requirement

Approximately 30 minutes are necessary for this exercise. (It will vary greatly depending on the type of problem.)

Preparation

Instructor

One of the most important factors in this exercise is the clarity of your instructions to the class. After reading through this exercise, prepare a clear statement of the problem and clear objectives for the groups.

Students

The students must have sufficient information and basic skills to deal with the problem. There should be little extra preparation for this exercise.

In Class Activity

Introduction

Begin by telling the students that you are trying out a problem solving exercise and will want some feedback about it at the end.

Ask the students to break up into groups of four. Have

each group choose a leader whose job it is to maintain the focus of the discussion towards a solution of the problem, and to record and report for the group.

When each group has a leader and all understand the leader's task, state the problem and the objectives for the groups. (A specific approach for solving the problem should be suggested if not inherent to the problem.) When the students are clear on the problem and their objectives, ask them to spend a specific amount of time working on it.

Procedure

While the students are working in their groups, circulate among them, listening in for short periods. Your comments should be minimal.

At the end of the allotted time, call for the attention of the class. Ask group leaders to report to the class. All groups should report unless there is agreement among groups. Your comments should be limited to clarity questions at this stage.

Summary and Instructor Feedback

Summarize the reports in a general manner, focusing on the entire class rather than specific groups. Following the summary offer constructive feedback which includes both the outstanding strong and weak points. Comments about weak points should include suggestions for remediation.

Student Feedback

With several minutes ask the students to respond in writing to two questions. First, Was the group effective in its dealing with the problem? If not, why? And second, What

were the strengths and weaknesses of the group?

Use the answers to these questions as a basis for checking your perceptions of the exercise.

You should anticipate that the students would like you to report a summary of the answers. This report should be made as soon after the exercise as possible.

Please Rate:

I. Organization of materials

A. 1 2 3 4 5
clear unclear

B. 1 2 3 4 5
coherent incoherent

Comments:

II. Presentation of instructions

A. 1 2 3 4 5
clear unclear

B. 1 2 3 4 5
appealing not appealing

Comments:

Please Predict

III. Use of this exercise in the classroom

1 2 3 4 5
successful unsuccessful

Comments:

Goals

The purpose of this exercise is to provide a situation in which all students in a class, regardless of size, may participate in a class discussion.

Other goals are generally the same as those listed in the General Discussion Exercise.

Group Size

This exercise may be used with any size class.

Time Requirements

Approximately 25 minutes are necessary for this exercise.

Preparation

One of the most important factors in this exercise is the clarity of your instructions to the students.

After reading through this exercise, review your notes for an upcoming class session. Choose a topic for discussion that will be specific enough to permit a focused discussion while at the same time general enough to allow for some discussion. A controversial question is probably most effective. Prepare a clear statement of the issue.

In-Class Activity

Introduction

Once the material has been covered in your lecture, you may begin the exercise. Tell the students that you are going to try out a discussion exercise and would like some feedback about it at the end.

Tell the students to break into groups of three or four.

Tell them to discuss the issue that you have chosen for five to ten minutes. When you are satisfied that the students understand what they are supposed to do, let the discussion begin.

Procedure

When the allotted time has passed, call for the attention of the students. Ask for brief summaries from several groups. Spend approximately five minutes on this reporting. Following this, give a brief summary of main points, new questions raised, etc. Give the class as a whole constructive feedback on their discussion.

Feedback

With several minutes left in the class session, ask the students to list what they liked and disliked about the discussion. Use the answers as a basis for checking your perceptions of the exercise.

Please Rate:

I. Organization of materials

A. 1 2 3 4 5
clear unclear

B. 1 2 3 4 5
coherent incoherent

Comments:

II. Presentation of instructions

A. 1 2 3 4 5
clear unclear

B. 1 2 3 4 5
appealing not appealing

Comments:

Please Predict

III. Use of this exercise in the classroom

1 2 3 4 5
successful unsuccessful

Comments:

Panel Discussion ExerciseGoals

The purpose of this exercise is to provide a situation in which students in a large lecture class may participate in a discussion.

Class Size

This exercise is designed for use in classes of 40 or more students.

Time Requirement

This exercise will require approximately 10 minutes of class time prior to the discussion, and a 50 minute class session for the discussion.

PreparationInstructor

Begin preparation for this exercise by choosing a topic for the discussion. It should be one that has several different aspects or points of view. A controversial issue will serve well. Prepare a concise statement of the issue, question, or topic. In addition, summarize the various aspects and/or points of view. This should be mimeographed if possible.

In choosing the date for the exercise, consider that it should take place in close proximity to treatment of the topic in your lecture. The following class or one after it are best. But also consider that the students will need some time to prepare.

On the day that you cover the material in class, use the last 10 minutes giving instructions for the discussion. Distribute the mimeographed sheets and tell the students to

read over them quickly. Then tell the students that you would like to have a panel discussion on that particular topic and need some students to make up the panel. The panel should be made up of 5 - 8 students. (You should also tell students that panel members will not need to do much additional preparation.) When you have the panel set, explain to the class how the discussion will proceed, stressing that they need to review the material also. Check to be sure that all understand what is to take place.

Meet for a short time after class with the members of the panel. Tell them that they need to be prepared to represent the point of view or aspect of the topic. They should be familiar with relevant course related material and suggest one or two outside resources for them to use. Make sure that each member knows what they are to do.

Students

Members of the panel should be familiar with relevant course related material. They should be familiar with the entire topic, not only with their particular aspect. It is not necessary for them to agree with the position, the emphasis is on representing it. Each member should prepare a brief (2 to 3 minutes) statement of their position.

Other members of the class should also be familiar with relevant course material.

In-Class Activity

Introduction

Begin the class by reviewing the topic and the procedure

for the discussion. Emphasize that your role is that of monitor.

Procedure

Introduce each panel member and then have one member give his or her prepared statement. Proceed until all members make their statements.

Following the statements, open the discussion up to the class. Questions or comments may be addressed to either an individual panel member or to the entire panel. Making sure the question is clear, direct it to appropriate members of the panel. Members of the panel may react to each other's answers or comments at this time, but you should actively moderate at this time.

Feedback

With five minutes remaining in the class session, cut off the discussion and briefly (one minute) give your feelings about it. Then ask the students to write the answers to two questions and leave them as they leave. First, What did you like and/or dislike about this discussion? And, second, What did you gain from the discussion?

Use the answers to these questions as a basis for comparing your reactions to the discussion. Give the class a brief summary of their responses as soon as possible.

Meet briefly with the members of the panel giving them constructive feedback on their performance as a group. Also ask them how it was to be a member of the panel.

Please Rate:

I. Organization of materials

A. 1 2 3 4 5
 clear _____ unclear

B. 1 2 3 4 5
 coherent _____ incoherent

Comments:

II. Presentation of instructions

A. 1 2 3 4 5
 clear _____ unclear

B. 1 2 3 4 5
 appealing _____ not appealing

Comments:

Please Predict

III. Use of this exercise in the classroom

1 2 3 4 5
 successful _____ unsuccessful

Comments:

EVALUATION SECTION

Formative Evaluation of Skills for Facilitating Student Participation

Formative evaluation of teaching skills involves the collection and analysis of data with the express purpose of providing direction for improvement efforts. In evaluating the skills for facilitating student participation there are several areas to be considered: communication skills, organizational skills, and group skills.

Communication Skills

The communication skills to be considered are: expression - use of verbal and non-verbal techniques to increase the power and meaning of communications; and feedback - soliciting and giving effective feedback to students.

Organizational Skills

The organizational skills to be considered are: introduction - presenting and giving clear, concise directions for an activity; objectives - defining reasonable, clear objectives for learning activities; and closure - integrating major outcomes of a learning activity and establishing links between the new and old material.

Group Skills

The group skills to be considered are: task - maintaining the progress of a group toward its objectives; and building and maintenance - building and maintaining an effective group setting.

Sources of Data

There are several valuable sources of data for assessing teaching skills. Each source has unique qualities but no one source is adequate in and of itself.

Students

Students are an often overlooked source of data. They are in

fact the consumers of education and that perspective is important to a complete assessment of teaching skills.

Observers

An observer can be a valuable source of data about teaching. The observer may be an instructional specialist, a colleague, or even a student.

Technology

Audio or videotapes can record classroom activities and thereby serve as the basis for careful review.

Self

One's self is a source of data that should always be considered in assessing teaching skills. But self is a source that should never be considered without additional data.

Gathering Data

When gathering data from students or observers it will be helpful to focus the feedback by using a questionnaire. There are several types of questions that may be used.

Open-ended Questions

This type of question allows the respondent to reply as they see fit. They tend to elicit general subjective comment. Example: In what ways does the instructor encourage you to participate in class activities?

This type of question may make up the entire questionnaire or be included with other types of questions.

Value Judgement Questions

A question of this type forces the respondent to make a value

judgement about an instructor's performance of a particular skill or behavior. Responses to this type of question is very easy to quantify. Example: The instructor's ability to get students to participate in class discussions. Responses: 1) No improvement is needed; 2) Little improvement is needed; 3) Improvement is needed; 4) Considerable improvement is needed; 5) Not a necessary skill or behavior for this course (TABS item #15).

Frequency Questions

This type of question asks the respondent to state the frequency of performance of particular behaviors. Example: The instructor gets me to participate in class discussions. Responses: 1) Always; 2) Frequently; 3) Sometimes; 4) Never.

Analyzing the Data

Purpose

The purpose of analyzing the data is to come to a decision as to what skills are done well and what skills are in need of improvement. In arriving at those decisions it is necessary to consider all of the data (including self-reported data) in light of several questions.

Goals of Instruction

Are the goals of instruction reasonable and at an appropriate level of challenge for the students?

Instructional Activities

Are the activities appropriate in order to reach your goals?

What other activities would accomplish your goals?

Students' Skills

To what extent do you need to help the students to develop

their "student" skills?

Analysis

After reviewing all of the data independently and collectively make a list of the three skills that are the strongest and the three that are the weakest. Prioritize the weak skills.

The weak skills, one at a time, should be the focus of improvement efforts.

Please Rate:

I. Organization of materials

A. 1 2 3 4 5
clear _____ unclear

B. 1 2 3 4 5
coherent _____ incoherent

Comments:

II. Development of materials

A. 1 2 3 4 5
comprehensive _____ not comprehensive

B. 1 2 3 4 5
applicable _____ not applicable

C. 1 2 3 4 5
accurate _____ inaccurate

Comments:

III. Presentation of materials

A. 1 2 3 4 5
clear _____ unclear

B. 1 2 3 4 5
appealing _____ not appealing

Comments:

Please Predict:

- IV. Objective: to provide information which will prepare
an instructor to evaluate his/her skills in facilitating

IV. (continued)

student participation

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
successful			unsuccessful	

Comments:

Other Comments:

Please Rate:

I. Organization of materials

A. 1 2 3 4 5
clear _____ unclearB. 1 2 3 4 5
coherent _____ incoherent

Comments:

II. Development of material

A. 1 2 3 4 5
comprehensive _____ not comprehensiveB. 1 2 3 4 5
applicable _____ not applicable

Comments:

C. 1 2 3 4 5
accurate _____ inaccurate

Comments:

III. Presentation of materials

A. 1 2 3 4 5
clear _____ unclearB. 1 2 3 4 5
appealing _____ not appealing

Comments:

Please Predict:

IV. Objective: to increase an instructor's understanding of and skill in facilitating productive student participation in the classroom

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
successful				unsuccessful

Comments:

Would you distribute this booklet to interested faculty clients?

_____ Yes _____ No

Comments:

What changes would you suggest be made before this booklet is used by faculty?

Other Comments:

APPENDIX E
PHASE II DEVELOPMENT AND
COMPONENT REVIEW MATERIALS

Draft

Facilitating Student Participation
in the Classroom

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Please feel free to write comments or questions at any point in this booklet. Your reactions will be most helpful in further developing this booklet.

In addition to your general comments in the manuscript, would you state below any modifications you would suggest before this booklet is used by faculty and TA's on this campus.

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Why Student Participation

One may ask why students should participate in classroom activities. There are a number of benefits for both instructor and students. In some cases these benefits can be the difference between a productive and unproductive educational experience for either the instructor or the students.

A primary benefit is in the enhancement of learning. Several studies () have shown that students who have the opportunity to practice and recite what they are learning show greater gains than those who do not have those opportunities. Students who participate in classroom activities also get feedback about their efforts; another important factor is the enhancement of learning. A classroom in which students may participate also provides necessary opportunities for those students who learn more effectively when they are actively involved in their educational experiences.

An important benefit for an instructor is that student participation in the classroom is a valuable source of feedback about one's teaching effectiveness. This feedback lets the instructor know how well the students are learning the material being presented. Student participation is also a source of variety in the classroom and an often welcome change from lecture. Students are also a source of the energy that is needed by instructors from time to time.

Objectives and Intended Use

This booklet, however, does not focus on the whys, it attempts to deal with the hows. The goal of using it is to increase one's

understanding of and skill in facilitating productive student participation in the classroom. The booklet is divided into three sections.

The explication section is intended to provide information about some important factors involved in facilitating student participation in the classroom. It also reviews some forms of student participation. The concepts introduced in the explication section are the basis for the exercise section; it is, therefore, most important that it be read before trying out any of the exercises.

The goal of the exercise section is to provide structured exercises which will help to develop skills for facilitating student participation. The exercises may be repeated at any appropriate time, and it is hoped that they will be used from time to time.

The intention of the evaluation section is to provide information through which an instructor may evaluate his/her skills in facilitating student participation. This evaluation may be done at any time, but it is intended that an instructor will evaluate his/her skills following the use of the other sections.

The booklet was designed for post-secondary instructors who meet with their classes once a week throughout a semester or an equivalent time. It is expected that class planning time will increase by approximately 30 minutes per week while using the booklet. Processing/reviewing time is also expected to increase by approximately 30 minutes per week. This additional time should diminish as skills develop.

Student participation in classroom activities is a particularly complex phenomenon which depends upon a number of both related and unrelated factors. This section focuses on several of those factors which an instructor has some direct influence and control.

Because of his/her focal position an instructor has strong influence on how students act as individuals and as a group in the classroom. This influence depends heavily upon the nature and quality of the communication established by the instructor and particularly the feedback that he/she gives to students.

These are the factors: individual or role behavior, group behavior, communication and feedback; which this section attempts to clarify. These are several of the factors which can be the difference between students participating or not participating in class activities.

Communication in the Classroom

Communication is probably the primary process in education. Instructors communicating their expertise to students is central to classroom activity. Effective communication is critical to successful classroom activity.

It is effective communication that is the issue. Simply stated, effective communication is a matter of understanding and being understood (Combs, et al, 1971). Think about your classroom experience for a moment. Have your students not understood what you were attempting to communicate? How do you go about making your self understood to your students? When your students understand you do you feel more successful than when they don't?

How does the communication break down? A basic problem is the fact that what is communicated is not what is intended but rather what is comprehended (Combs, et al, 1971).

An important question to be considered is that of how to make one's communication more effective. How can an instructor be better understood by his/her students?

First, is the recognition of responsibility in effective communication. In general, responsibility lies with the instructor, not with the students (Combs, et al, 1971). Accepting this responsibility, the next step involves a closer look at communication and some of the characteristics of effective communication.

When one makes a statement that is intended to be communicated there are three factors to consider: the meaning of the words, the emotional impact of the words, and the non-verbal aspects of the communication.

Do the students know the meaning of the words that you use? The everyday jargon of an expert in a field is likely to be over the heads of most undergraduate students.

What kind of emotional impact are the words likely to have? Students often react emotionally to an idea that an instructor views objectively.

What is suggested by the posture or facial expression of an instructor as he/she speaks? A good deal of the information we take in is based upon non-verbal cues such as facial expression, posture, tone of voice, eye contact, animation, etc. (Combs, et al, 1971).

A characteristic of effective communication is that it is related in some way to that which students want or need to know (Combs, et al, 1971). These needs may be related to examinations

or other course requirements, or to the interests or curiosities of the students. A question for an instructor to consider is, "Why will students want to know what you have to say?" The need must be perceived by the students. 172

Simplicity has great value in effective communication. Simple explanations are more likely to be comprehended by students. Again, what is simple to a scholar in a field is not necessarily simple to a student. The simplicity will be decided by the student.

Closely related to simplicity is the fact that the speed and pacing of effective communication is related to the rate of comprehension. Time must be spent in making certain that meanings are conveyed. It is important that an instructor find out whether or not he/she is being understood.

Given that communication is an interactive process, an important aspect of effective communication is listening. Effective listening includes attending to verbal and non-verbal expressions and acquisition of listening skills requires conscious effort. The payoff, however, is well worth the effort. Students are more likely to communicate with an instructor who listens to what they have to say.

Role Behavior in the Classroom

Organizational psychology provides a valuable perspective for looking at another factor involved in student participation. One may look at the behavior of both students and instructors in a classroom in terms of the role he/she performs. It is usually easy to determine who are the students and who are the instructors in a classroom situation. Think, for a moment, about one class in which you were in the role of student and one

in which you were in the role of instructor. How was your behavior ¹⁷³ different in these situations? How was your behavior typical of you in each situation?

Your typical actions in these situations are examples of role behavior. According to social psychologists, role behavior refers to the recurring activities of others, appropriately interrelated with the respective activities of others so as to yield a predictable outcome (Katz & Kahn, 1966). In general terms, the predictable outcome of the interaction between instructor activities and student activities is learning.

Our role behavior is largely determined by expectations we have for ourselves and others. These expectations are the prescriptions and proscriptions of attitudes about what a person should and should not do as a part of their role (Katz & Kahn, 1966). Unfortunately, teachers and students seldom communicate explicitly about the role expectations they have for one another.

Role expectations are, however, communicated in two basic ways. First, there are direct instructions, typically, by the teacher. A syllabus is often the source of these instructions. Second, and generally more powerful, are verbal and non-verbal actions in the classroom that attempt to influence the students' or the instructor's behavior. For example, students attempt to influence instructors to lecture by sitting passively during class. Or, instructors attempt to influence students to sit passively by not recognizing students with questions. What do you do to attempt to influence the behavior of your students? What do they do to attempt to influence your behavior?

Again, as with all communication, it is the expectation that is¹⁷⁴ perceived rather than that which is intended which influences behavior (Katz & Kahn, 1966). This fact stresses the importance of making expectations explicit.

The next step is to eliminate as much conflict between expectations as possible. Typically conflict occurs when one's expectations are incompatible, for example, when a teacher expects students to take notes and discuss during class. Or conflict may occur when the expectations of an instructor are beyond the capabilities of the students, for example, when an instructor expects students to discuss material that is not clearly understood by them.

Students also find themselves overloaded so that he/she cannot complete all of the tasks urged by various people within the stipulated time limits and requirements of quality. This is a particularly debilitating type of conflict.

Clarifying expectations and reducing conflict involved increases the likelihood that students, individually, will meet those expectations. The next factor involved in students' participating in classroom activities involves the behavior of people in groups.

Group Behavior in the Classroom

Most classroom situations in which students actively participate involve a group task or problem to be solved. As students participate in these activities, the classroom takes on the characteristics of a group situation.

Those who study the behavior of people in groups have found that in most successful group situations, two types of needs must be met. First, the group must progress toward a solution to its

problem. This type of activity is called task behavior. Second, 175 the group feeling must be strengthened and maintained. This type of activity is called maintenance behavior (Bradford, 1961). For the group situation to be productive, there must be a balance of task and maintenance behavior and a minimum of disfunctional behavior. It is important to note that disfunctional behavior is an indication that the group activity is not satisfying individual needs.

The following is a list of group behaviors isolated at the National Training Laboratory. As you look over the list think of examples of these behaviors that are exhibited in your classroom.

Task Behaviors - involving the selection and completion of a group task:

Initiating Activity - defining the task, proposing solutions, suggesting approaches to the task, organizing the material

Seeking Information - asking for clarification of suggestions, requesting information

Seeking Opinions - seeking expression of opinion about something, seeking clarification of values, suggestions, or ideas

Giving Information - offering facts or generalizations, relating experience to the problem

Giving Opinion - stating beliefs concerning an idea, value or question

Elaborating - clarifying, offering examples, developing meaning, projecting on the adoption of a proposal

Coordinating - pointing out relationships among ideas or suggestions, pulling ideas and/or suggestions together, drawing

together activities of sub-groups or members

Summarizing - pulling related ideas or suggestions together, restating suggestions following discussion

Evaluating - submitting decisions or accomplishments for comparison to group standards, comparing accomplishments to goals

Diagnosing - determining sources of difficulties, determining next steps, analyzing blocks to progress

Testing for Consensus - checking on group opinions, checking on whether the group is nearing consensus

Maintenance Behaviors - involves building and maintaining group activity:

Encouraging - being friendly, warm, responsive to others, praising, agreeing, accepting contributions of others

Gate-keeping - facilitating contributions of other group members

Standard Setting - expressing group standards of procedure or evaluation, restating standards

Following - going along with group decisions, accepting ideas of others

Expressing Group Feelings - summarizing understanding of group feeling, describing reactions of the group

Mediating - harmonizing, conciliating differences, offering compromise solutions

Relieving Tension - easing tension through humor, providing perspective for a tense situation

Disfunctional Behaviors - involves actions that do not help and often hinder the function of a group:

Being Aggressive - criticizing or blaming others, showing

hostility toward the group or its members, deflating the ego or status of others

Blocking - interfering with the progress of the group, going off on a tangent, citing unrelated personal experience, arguing too much, rejecting ideas without consideration

Self-Confessing - using the group as a sounding board, expressing non-group-oriented feelings or points of view

Competing - vying with other group members

Seeking Sympathy - trying to induce group members to be sympathetic to one's problems, disparaging one's own ideas

Horsing Around - clowning, joking, disrupting group work

Seeking Recognition - attempting to call attention to one's self

Withdrawal - acting indifferent or passive, daydreaming, whispering to others, wandering from the subject

The group activities in the classroom will be more efficient if the instructor and the students work toward improving their roles in these activities. This can be done by: becoming aware of necessary behavior; becoming more aware of the degree to which they contribute to the group through their behavior; working at improving their skill in performing group behaviors; reducing the number of unproductive questions; and by reducing the amount of unnecessary verbiage (Bradford, 1961).

Feedback in the Classroom

Typically, students receive feedback about their performance in a course through examinations and other written assignments. This feedback gives students information about both how well they

are doing and what they need to do to be successful in their efforts.178 Students also need this type of information about their efforts in classroom participation. Constructive feedback will provide them with the ongoing guidance that many students need in order to be active classroom participants.

Consider the following list of characteristics of constructive feedback (Bergquist & Phillips, 1975) in relation to the feedback that you give to your students.

1. It is specific rather than general. To be told that one is "dominating" will probably not be as useful as to be told that "in the conversation that just took place, you did not appear to be listening to what others were saying, and I felt forced to accept your arguments."
2. It is focused on behavior rather than on the person. It is important that we refer to what a person does rather than to what we think or imagine he is. Thus we might say that a person "talked more than anyone else in this meeting" rather than that he is a "loud-mouth." The former allows for the possibility of change; the latter implies a fixed personality trait.
3. It takes into account the needs of both the receiver and giver of feedback. Feedback can be destructive when it serves only our own needs and fails to consider the needs of the person on the receiving end. It should be given to help, not to hurt. We too often give feedback because it makes us feel better or gives us a psychological advantage.
4. It is directed toward behavior which the receiver can do something about. Frustration is only increased when a person is reminded

of some shortcoming over which he has no control.

5. It is well-timed. In general, feedback is most useful at the earliest opportunity after the given behavior (depending, of course, on the person's readiness to hear it, support available from others, and so forth). The reception and use of feedback involves many possible emotional reactions. Excellent feedback presented at an inappropriate time may do more harm than good.
6. It involves sharing of information, rather than giving advice. By sharing information, we leave a person free to decide for himself, in accordance with his own goals and needs. When we give advice we tell him what to do, and to some degree take away his freedom to decide for himself.
7. It involves the amount of information the receiver can use rather than the amount we would like to give. To overload a person with feedback is to reduce the possibility that he may be able to use what he receives effectively. When we give more than can be used, we are more often than not satisfying some need of our own rather than helping the other person.
8. It concerns what is said and done, or how, not why. The "why" takes us from the observable to the inferred and involves assumptions regarding motive or intent. Telling a person what his motivations or intentions are more often than not tends to alienate the person and contributes to a climate of resentment, suspicion, and distrust; it does not contribute to learning or development. It is dangerous to assume that we know why a person says or does something, or what he "really" means, or what he is "really"

trying to accomplish. If we are uncertain of his motives or intent, this uncertainty itself is feedback, however, and should be revealed.

9. It is checked to insure clear communication. One way of doing this is to have the receiver try to rephrase the feedback he has received to see if it corresponds to what the sender had in mind. No matter what the intent, feedback is often threatening and thus subject to considerable distortion or misinterpretation.
10. It is followed by attention to the consequences of the feedback. The person who is giving feedback may greatly improve his helping skills by becoming acutely aware of the effects of his feedback. He can also be of continuing help to the recipient of the feedback.
11. It is an important step toward authenticity. Constructive feedback opens the way to a relationship which is built on trust, honesty, and genuine concern. Through such a relationship, we will have achieved one of the most rewarding experiences that man can achieve and will have opened a very important door to personal learning and growth.

With these characteristics in mind, what do you need to do in order to make your feedback more constructive?

Alternatives for Student Participation

The following is a list of commonly used teaching methods based on student participation.

1. Class Discussion

Class discussions are initiated and led by the teacher. He/she exercises a good deal of control over the direction of the discussion.

All students are expected to participate and often are asked to contribute in turn, in order to begin the discussion. It is most appropriate for dealing with specific topics or questions.

A major limitation of this method is that it is effective in classes of twenty students or less. The material for the discussion must be carefully planned to allow for some clear focus.

2. Small Group Discussion

Small group discussions are initiated by the teacher and are conducted by small groups (three or four) of students. They deal with a specific issue or question for a short period of time (five to ten minutes). These discussions are most appropriate for dealing with very specific topics or questions.

Small group discussions are effective when the directions and the topic for discussion is clear to the students.

3. Panel Discussion

This method involves a selected group of students who discuss an issue in front of the entire class. The class joins in the discussion after a set period of time. It is an effective way of stimulating discussion in larger classes.

This type of discussion may become emotional and the focus shifting from the content to the personalities of the panel members.

4. Symposium

This method involves a small group of persons who are well informed on various aspects of a particular topic. The members of the symposium give reports and respond to questions from the entire class. This is an effective alternative for presenting specific

information.

Like a panel discussion, the focus may shift from the content to the personalities of the speakers.

5. Debate

This is a pro-con discussion of controversial issues. The speakers attempt to convince the class of their point of view. It is most effective in dealing with issues with definitive sides.

A problem with debate is that objectivity is often difficult to maintain.

6. Reverse Thinking

In this technique students are asked to express their thoughts in reverse. It must be used in combination with other discussion methods. Reverse thinking helps students to gain insights into other points of view. It can, however, become confusing.

7. Role Playing

This involves selected members of the class acting out a situation or incident. It is particularly helpful in gaining insight into the dynamics of a situation. A limitation of this technique is that the actors may become self-conscious.

8. Brainstorming

This is a group problem-solving technique based upon creative thinking in a short period of time (five minutes). It is effective in generating numerous alternative solutions. The rules are: 1) the emphasis is on quantity, the more ideas, the better; 2) there is no evaluation of ideas, that can be done later; 3) offbeat ideas are welcome; and 4) taking off on others' ideas is encouraged. One

member of the class records the ideas.

Brainstorming must be used in conjunction with other discussion methods. It will not stand on its own.

9. Learning Cell

The learning cell involves a brief focused discussion between two students about particular reading assignments. The instructor provides several questions for the diads (cells) to discuss.

This is particularly effective for establishing the base for large group discussions.

10. Student-led Activities

All of the above methods may be led by students with the supervision of the teacher.

Exercise Section

Communication of Student Roles

The communication of student roles is the first step in facilitating student participation. Considering that you expect students to participate in classroom activities, then communicating your expectations to students is the starting point. Review the section on role behavior before doing this exercise.

Goal

The purpose of this exercise is to make explicit to the students what types of behaviors are expected of them in the classroom.

Group Size

This exercise may be used with any size class.

Time Requirement

This exercise requires approximately 10 - 20 minutes of class time.

Preparation

Preparation for this exercise is most important. The first step is an examination of exactly what you expect students to do in the classroom.

Make a list of what you would like students to do in the classroom. Consider - Do you want students to ask questions? If so, what kind of questions (clarity, challenging, application, etc.)? How much time do you want to devote to student participation?

Now review your list and ask yourself what the benefits are of these behaviors ... to you ... to the student. If any items on your list seem inappropriate cross them off.

Now make a list of behaviors that you feel that students will want to do in the classroom. Consider these in terms of their benefit to students ... their benefit to you. Check off the behaviors that

you consider inappropriate. Consider why they are inappropriate. 187
Add to your first list any behaviors that you feel you can accommodate.

Review your list again this time considering whether or not these expectations are realistic. Drop any items that are not realistic.

Class Activity

Introduction

At the start of a class session, as early in the semester as possible, explain what you expect students to do in the classroom and your rationale for your expectations, i.e., you expect students to ask questions when they do not understand the material, so that you will know what they are having difficulty with and that they will be clear about the material. Following this explanation ask the students for their reactions to these expectations. You should be prepared to respond to a variety of reactions, i.e., one student not wanting to take class time discussing material and another feeling that he/she will find that discussion helpful. At the end of this discussion, summarize your expectations.

Procedure

At the beginning of a class, stress the behaviors that you think will be most productive for that particular class session. This will also serve as a reminder of what you expect students to do.

During class sessions, reinforce students for acting in the ways you have encouraged. The frequency of reinforcement may be diminished as students exhibit the behaviors more

frequently. The reinforcement should not be discontinued.

Feedback

Feedback about your expectations should be sought at several points.

The first time this feedback should be sought is when your expectations are introduced. At this time you should ask students whether or not they feel the expectations are reasonable in light of your objectives and their objectives for the course. Also, you should ask what you can do to help the students meet your expectations.

In the first class after the introduction of your expectations, ask the students to write the answers to the following questions:

1) What are students expected to do in this classroom? 2) Do these expectations aid or hinder your learning in this course? In what ways? 3) What could you do in the classroom to improve your learning in this course? The responses to these questions should be anonymous.

When reviewing responses to these questions, consider how appropriate your expectations are. Consider what adjustments may be necessary.

Summarize the results for the class as soon as possible. At the same time discuss any changes in your expectations. (If this is the case, gather written feedback in the manner described above.)

General Discussion Exercise

This exercise is a basic technique for student participation in the classroom. It provides for a wide range of possibilities

or content and direction. This type of discussion may be used in a variety of disciplines.

Goals

The process of class discussion is useful in accomplishing a number of goals. These goals, compiled by McKeachie, 1969, are:

- to make use of the resources of class members;
- to obtain feedback on how well instructional objectives are being met;
- to give students an opportunity to practice thinking in terms of the subject matter;
- to provide students with feedback about their logic and position;
- to help students in processing information presented in course materials;
- to counter student dissonance regarding course materials;
- to foster student motivation for learning the course material.

Group Size

This exercise is designed to be used in classes of up to twenty-five students.

Time Requirement

Approximately ten minutes of in-class preparation time will be necessary in addition to one entire (50 minutes) class session for the exercise itself.

Preparation

Instructor

In preparation for this exercise, you should first decide upon the goals for the discussion. Two or three of the process goals presented at the beginning of this exercise should be chosen

as the focus of the discussion. With them in mind, decide upon¹⁹⁰ the content of the discussion. The content must be broad enough to support a discussion at the same time being narrow enough to be manageable. For example, How did black voters influence the 1976 presidential election; or What are the potential hazards of nuclear generating plants on local ecology?

Review the materials for discussion and anticipate questions and/or comments by students. Review your position on the material and your response to anticipated questions and/or comments.

Students

Approximately one week before the discussion is to take place, tell the students about it. Tell them what materials will be covered and the scope of the discussion. Tell them what they will be expected to do.

They will be expected to formulate questions or comments on the material. They will be expected to ask and respond to questions or comments by members of the class. Give examples of what you anticipate to be brought up in the discussion. Tell the students what you expect to do in the discussion. You will be primarily a facilitator rather than a participant in the discussion.

Tell the students, also, that you are trying out a discussion exercise and will be seeking their feedback about it.

At the end of the class prior to the discussion, briefly restate the assignment as a reminder to the class.

In-Class ActivityIntroduction

Introduce the discussion by again briefly restating the assignment and what your and student roles are expected to be.

Procedure

Initiate the discussion by asking for a brief summary of the material. Ask students to offer one summary point each until there is agreement that the summary is complete. (If there are no immediate volunteers, tell the students that all will be asked to participate and begin by asking an individual student to offer a summary point.)

Note: You should have limited input into the content of the summary. This part of the discussion should be limited to 5 - 7 minutes.

When there is agreement that the summary is complete, restate the summary points (making a list will help), and ask students for their questions or comments about the material. Ask members of the class to respond to a question or comment. (It may be necessary to restate the questions or comments to insure common understanding.) When a question or comment has been exhausted or concensus reached, move on to another question or comment.

Repeat this procedure until all of the questions or comments have been dealt with; or until there is only 10 minutes remaining in the class session.

During the discussion resist the temptation of becoming a participant. Encourage students by reinforcing their participation.

Refocus the discussion if it is not progressing or is going off 192 on a tangent. Participate only as a last resort; the students are the primary source of this discussion.

Summary

With ten minutes remaining in the class session, cut off the discussion so that you may summarize and spend a short time on feedback. In a five minute (approximately) summary, restate the major issues, questions, and/or conclusions. Include any unresolved issues. During the summary you may put the topic of discussion into perspective if appropriate. Sources for follow-up may be suggested.

Feedback

Spend the final five minutes of class on obtaining feedback about the discussion. Ask the students to respond in writing to several questions. First, did the discussion meet the content objectives you set (list the objectives)? Second, what did the students feel were the strengths and weaknesses of the process of discussion (as opposed to lecture, for example)? And third, what was their reaction to the discussion?

Use the answers to these questions as a basis for checking your perceptions of the exercise.

You should anticipate that the students would like you to report a summary of the answers. This summary should be made as soon after the discussion as possible.

Problem Solving Groups

Problem solving and critical thinking are endeavors which are highly valued by many instructors. This exercise helps to structure

student attempts at these activities.

Goals

The purpose of this exercise is to provide a situation in which students can develop their problem solving skills.

Group Size

This exercise is designed to be used in classes of up to 40 students.

Time Requirement

Approximately 30 minutes are necessary for this exercise. (It will vary greatly depending on the type of problem.)

Preparation

Instructor

One of the most important factors in this exercise is the clarity of your instructions to the class. After reading through this exercise, prepare a clear statement of the problem and clear objectives for the groups.

Students

The students must have sufficient information and basic skills to deal with the problem. There should be little extra preparation for this exercise.

In Class Activity

Introduction

Begin by telling the students that you are trying out a problem solving exercise and will want some feedback about it at the end.

Ask the students to break up into groups of four. Have each group choose a leader whose job it is to maintain the

focus of the discussion towards a solution of the problem, and to record and report for the group.

When each group has a leader and all understand the leader's task, state the problem and the objectives for the groups. (A specific approach for solving the problem should be suggested if not inherent to the problem.) When the students are clear on the problem and their objectives, ask them to spend a specific amount of time working on it.

Procedure

While the students are working in their groups, circulate among them, listening in for short periods. Your comments should be minimal.

At the end of the allotted time, call for the attention of the class. Ask group leaders to report to the class. All groups should report unless there is agreement among groups. Your comments should be limited to clarity questions at this stage.

Summary and Instructor Feedback

Summarize the reports in a general manner, focusing on the entire class rather than specific groups. Following the summary offer constructive feedback which includes both the outstanding strong and weak points. Comments about weak points should include suggestions for remediation.

Student Feedback

With several minutes ask the students to respond in writing to two questions. First, Was the group effective in its dealing with the problem? If not, why? And second, What were the strengths and weaknesses of the group?

Use the answers to these questions as a basis for checking¹⁹⁵ your perceptions of the exercise.

You should anticipate that the students would like you to report a summary of the answers. This report should be made as soon after the exercise as possible.

Small Group Discussion

Small group discussions are worthwhile for both generating participation and for breaking up longer activities into more manageable blocks of time.

Goals

The purpose of this exercise is to provide a situation in which all students in a class, regardless of size, may participate in a class discussion.

Other goals are generally the same as those listed in the General Discussion Exercise.

Group Size

This exercise may be used with any size class.

Time Requirements

Approximately 25 minutes are necessary for this exercise.

Preparation

One of the most important factors in this exercise is the clarity of your instructions to the students.

After reading through this exercise, review your notes for an upcoming class session. Choose a topic for discussion that will be specific enough to permit a focused discussion while at the same time general enough to allow for some discussion. A controversial question is probably most effective. Prepare a clear statement of

the issue.

In-Class Activity

Introduction

Once the material has been covered in your lecture, you may begin the exercise. Tell the students that you are going to try out a discussion exercise and would like some feedback about it at the end.

Tell the students to break into groups of three or four. Tell them to discuss the issue that you have chosen for five to ten minutes. When you are satisfied that the students understand what they are supposed to do, let the discussion begin.

Procedure

When the allotted time has passed, call for the attention of the students. Ask for brief summaries from several groups. Spend approximately five minutes on this reporting. Following this, give a brief summary of main points, new questions raised, etc. Give the class as a whole constructive feedback on their discussion.

Feedback

With several minutes left in the class session, ask the students to list what they liked and disliked about the discussion. Use the answers as a basis for checking your perceptions of the exercise.

Panel Discussion

Panel discussions give students an opportunity to learn and practice a wide variety of skills, from critical thinking to presenting

a position to challenging a point of view. This type of activity can be particularly exciting in many disciplines.

Goals

The purpose of this exercise is to provide a situation in which students in a large lecture class may participate in a discussion.

Class Size

This exercise is designed for use in classes of 40 or more students.

Time Requirement

This exercise will require approximately 10 minutes of class time prior to the discussion, and a 50 minute class session for the discussion.

Preparation

Instructor

Begin preparation for this exercise by choosing a topic for the discussion. It should be one that has several different aspects or points of view. A controversial issue will serve well. Prepare a concise statement of the issue, question, or topic. In addition, summarize the various aspects and/or points of view. This should be mimeographed if possible.

In choosing the date for the exercise, consider that it should take place in close proximity to treatment of the topic in your lecture. The following class or one after it are best. But also consider that the students will need some time to prepare.

On the day that you cover the material in class, use the last 10 minutes giving instructions for the discussion.

Distribute the mimeographed sheets and tell the students to read over them quickly. Then tell the students that you would like to have a panel discussion on that particular topic and need some students to make up the panel. The panel should be made up of 5 - 8 students. (You should also tell students that panel members will not need to do much additional preparation.) When you have the panel set, explain to the class how the discussion will proceed, stressing that they need to review the material also. Check to be sure that all understand what is to take place.

Meet for a short time after class with the members of the panel. Tell them that they need to be prepared to represent the point of view or aspect of the topic. They should be familiar with relevant course related material and suggest one or two outside resources for them to use. Make sure that each member knows what they are to do.

Students

Members of the panel should be familiar with relevant course related material. They should be familiar with the entire topic, not only with their particular aspect. It is not necessary for them to agree with the position, the emphasis is on representing it. Each member should prepare a brief (2 to 3 minutes) statement of their position.

Other members of the class should also be familiar with relevant course material.

In-Class Activity

Introduction

Begin the class by reviewing the topic and the procedure

for the discussion. Emphasize that your role is that of monitor.

Procedure

Introduce each panel member and then have one member give his or her prepared statement. Proceed until all members make their statements.

Following the statements, open the discussion up to the class. Questions or comments may be addressed to either an individual panel member or to the entire panel. Making sure the question is clear, direct it to appropriate members of the panel. Members of the panel may react to each other's answers or comments at this time, but you should actively moderate at this time.

Feedback

With five minutes remaining in the class session, cut off the discussion and briefly (one minute) give your feelings about it. Then ask the students to write the answers to two questions and leave them as they exit. First, What did you like and/or dislike about this discussion? And, second, What did you gain from the discussion?

Use the answers to these questions as a basis for comparing your reactions to the discussion. Give the class a brief summary of their responses as soon as possible.

Meet briefly with the members of the panel giving them constructive feedback on their performance as a group. Also ask them how it was to be a member of the panel.

Formative Evaluation of Skills forFacilitating Student Participation

Formative evaluation of teaching skills involves the collection and analysis of data with the express purpose of providing direction for development efforts. This "formative" evaluation is analogous to the feedback to students discussed in a prior section of this booklet.

The explication and exercise sections focus upon three areas of skill which have direct impact on student participation. These areas are communication skills, group skills, and organization skills, and will be the focus of the evaluation."

Communication

The dimensions of communication skills to be considered are: "effectiveness" - as described in the explication section, pertaining to reading mutual understanding between you and your students; and, feedback - soliciting and giving effective feedback to your students.

Organization

The dimensions of organization skills to be considered are: introduction - presenting and giving clear concise directions for an instructional activity; objectives - defining reasonable, clear objectives for learning activities; and, closure - integrating major outcomes of a learning activity and establishing links between the new and old material.

Group

The dimensions of group skills to be considered are: task - maintaining the progress of a group toward its objective; and,

maintenance - establishing and maintaining an effective group setting.

It is intended that you will design and conduct your own evaluation. There will, however, be a sample questionnaire included at the end of this section.

Sources of Data

There are several valuable sources of data for your assessing teaching skills. Each source has unique qualities and perspective but no one source is adequate in and of itself. Multiple data sources for assessing teaching skills (Melnik, 1972) have been found to be an effective approach (Erickson & Sheehan, 1974).

Students

Students are always an important source of information about teaching skills. When assessing skills for facilitating student participation, they are the most important source, for obvious reasons.

Observers

An observer who is not a part of the class can provide a unique perspective on what is happening in the classroom. The observer may be an instructional specialist, a colleague, or a student.

Technology

Audio or videotapes can record classroom activities in such a way as to provide for careful review.

Self

One's self is a source of data that should not be overlooked when evaluating your skills. Self-assessment in relation to other

sources is a powerful perception check.

Collecting Data

Collecting data will be facilitated by the use of a questionnaire that may be used by observers, students and self. A questionnaire used in this way will systematically focus the data on the specific dimensions to be evaluated. It may be made up of several different types of or combinations of questions. Each provides slightly different data.

Open-ended Questions

This type of question encourages the respondent to reply subjectively. Example: In what way does the instructor encourage you to participate in class activities?

Value Judgement Questions

A question of this type forces the respondent to make a value decision about your performance of a particular skill or behavior. Responses to this type of question are very easy to qualify. Example: The instructor's ability to get students to participate in class discussions. Response choices: 1) No improvement is needed; 2) Little improvement is needed; 3) Improvement is needed; 4) Considerable improvement is needed; 5) Not a necessary skill or behavior for this course (Item #15 Teaching Analysis By Students © Clinic to Improve University Teaching, 1974).

Frequency Questions

This type of question asks the respondent to state the frequency of performance of particular behaviors. Frequency questions are also very easy to quantify. Example: The instructor gets me to

participate in class discussions. Responses: 1) Always; 2) Frequently;²⁰³
3) Sometimes; 4) Never.

When designing your questionnaire decide first on which dimensions of facilitating student participation you wish to focus. Make a list of those dimensions and write a question for each. A combination of open-ended and other types of questions will provide for a range of data.

Distribute your questionnaire to students and have them fill them out during class. They should be allowed to remain anonymous so that their assessment is not biased by fear of retaliation. Ask your observer, if any, to complete the questionnaire following his/her observation. Complete a self-assessment using the questionnaire. Be sure that the questionnaires from different sources are kept separate.

Once you have quantified the responses where appropriate and taping, if any, has been completed you are ready to analyze your data.

Analyzing the Data

As you begin to analyze your data it is important to re-state the purpose of this evaluation. That purpose is to come to a decision as to which aspects of your skills for facilitating student participation are done well and which are in need of development. In order to arrive at those decisions it is necessary to consider all of the data (including self-reported data) in light of several questions.

Goals of Instruction

Are the goals of instruction reasonable and at an appropriate level of challenge for the students?

Instructional Activities

Are the activities appropriate in order to reach your goals?

What other activities would accomplish your goals?

Students' Skills

To what extent do you need to help the students to develop their "student" skills?

What level of participation is realistic to expect from your students?

Analysis

After reviewing all of the data independently and collectively, make a list of those aspects that are the strongest and those that are weakest, based on the data.

Prioritize the weak aspects considering what you feel has the greatest impact on your class.

Your ongoing development efforts should be based on this prioritized list. It is suggested that you focus on one aspect at a time beginning with the highest priority.

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APPENDIX F
PILOT TEST PACKAGE

Facilitating Student Participation
in the Classroom

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April, 1977

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Objectives and Intended Use

The goal of use of this booklet is to increase one's understanding of and skill in facilitating productive student participation in the classroom. The booklet does not focus on the whys, its purpose is to deal with the hows.

The first section, titled Student Participation in the Classroom, is intended to provide information about some important factors involved in facilitating student participation in the classroom. It also reviews some forms of student participation. The concepts introduced in the explication section are the basis for the exercise section; it is, therefore, most important that it be read before trying out any of the exercises.

The goal of the exercise section is to provide structured exercises which will help to develop skills for facilitating student participation. The exercises may be repeated at any appropriate time, and it is hoped that they will be used from time to time.

The intention of the section titled Formative Evaluation of Skills for Facilitating Student Participation is to provide information through which an instructor may evaluate his/her skills in facilitating student participation. This section is not intended to be a comprehensive treatment of evaluating teaching skills and behaviors. This evaluation may be done at any time, but it is intended that an instructor will evaluate his/her skills following the use of the other sections.

The booklet was designed for post-secondary instructors who meet with their classes once a week throughout a semester or an equivalent time. It is expected that class planning time will

increase by approximately 30 minutes per week while using the booklet. Processing/reviewing time is also expected to increase by approximately 30 minutes per week. This additional time should diminish as skills develop.

Why Student Participation

One may ask why students should participate in classroom activities. There are a number of benefits for both instructor and students. In some cases these benefits can be the difference between a productive and unproductive educational experience for either the instructor or the students.

Several authors (Gagne, 1965; Biehler, 1971; Loree, 1970; McKeachie, 1969) suggest that students who have the opportunity to practice and recite what they are learning show greater gains than those who do not have those opportunities. Students who participate in classroom activities also get feedback about their efforts, another important factor in the enhancement of learning (Davis, Alexander, and Yelon, 1974). A classroom in which students may participate also provides necessary opportunities for those students who learn more effectively when they are actively involved in their educational experiences (Rogers, 1969).

An important benefit for an instructor is that student participation in the classroom is a valuable source of feedback about one's teaching effectiveness. This feedback lets the instructor know how well the students are learning the material being presented. Student participation is also a source of variety in the classroom and an often welcome change from lecture. Students are also a source of the energy that is needed by instructors from time to time.

Student Participation in the Classroom

Student participation in classroom activities is a particularly complex phenomenon which depends upon a number of both related and unrelated factors. This section focuses on several of those factors which an instructor has some direct influence and control.

Because of his/her focal position an instructor has strong influence on how students act as individuals and as a group in the classroom. This influence depends heavily upon the nature and quality of the communication established by the instructor and particularly the feedback that he/she gives to students.

These are the factors: individual or role behavior, group behavior, communication and feedback; which this section attempts to clarify. These are several of the factors which can be the difference between students participating or not participating in class activities.

Communication in the Classroom

Communication is probably the primary process in education. Instructors communicating their expertise to students is central to classroom activity. Effective communication is critical to successful classroom activity.

It is effective communication that is the issue. Simply stated, effective communication is a matter of understanding and being understood (Combs, et al, 1971). Think about your classroom experience for a moment. Have your students not understood what you were attempting to communicate? How do you go about making your self understood to your students? When your students understand you do you feel more successful than when they don't?

How does the communication break down? A basic problem is the fact that what is communicated is not what is intended but rather what is comprehended (Ibid.).

An important question to be considered is that of how to make one's communication more effective. How can an instructor be better understood by his/her students?

First, is the recognition of responsibility in effective communication. In general, responsibility lies with the instructor, not with the students (Ibid.). Accepting this responsibility, the next step involves a closer look at communication and some of the characteristics of effective communication.

When one makes a statement that is intended to be communicated there are three factors to consider: the meaning of the words, the emotional impact of the words, and the non-verbal aspects of the communication.

Do the students know the meaning of the words that you use? The everyday jargon of an expert in a field is likely to be over the heads of most undergraduate students.

What kind of emotional impact are the words likely to have? Students often react emotionally to an idea that an instructor views objectively.

What is suggested by the posture or facial expression of an instructor as he/she speaks? A good deal of the information we take in is based upon non-verbal cues such as facial expression, posture, tone of voice, eye contact, animation, etc. (Ibid.).

A characteristic of effective communication is that it is related in some way to that which students want or need to know (Ibid.). These needs may be related to examinations

or other course requirements, or to the interests or curiosities of the students. A question for an instructor to consider is, "Why will students want to know what I have to say?" The need must be perceived by the students.

Simplicity has great value in effective communication. Simple explanations are more likely to be comprehended by students. Again, what is simple to a scholar in a field is not necessarily simple to a student. The simplicity will be decided by the student.

Closely related to simplicity is the fact that the speed and pacing of effective communication is related to the rate of comprehension. Time must be spent in making certain that meanings are conveyed. It is important that an instructor find out whether or not he/she is being understood.

Given that communication is an interactive process, an important aspect of effective communication is listening. Effective listening includes attending to verbal and non-verbal expressions and acquisition of listening skills requires conscious effort. The payoff, however, is well worth the effort. Students are more likely to communicate with an instructor who listens to what they have to say.

Role Behavior in the Classroom

Organizational psychology provides a valuable perspective for looking at another factor involved in student participation. One may look at the behavior of both students and instructors in a classroom in terms of the role he/she performs. It is usually easy to determine who are the students and who are the instructors in a classroom situation. Think, for a moment, about one class in which you were in the role of student and one

in which you were in the role of instructor. How was your behavior different in these situations? How was your behavior typical of you in each situation?

Your typical actions in these situations are examples of role behavior. According to social psychologists, role behavior refers to the recurring activities of others, appropriately interrelated with the respective activities of others so as to yield a predictable outcome (Katz & Kahn, 1966). In general terms, the predictable outcome of the interaction between instructor activities and student activities is learning.

Our role behavior is largely determined by expectations we have for ourselves and others. These expectations are the prescriptions and proscriptions of attitudes about what a person should and should not do as a part of their role (Ibid.). Unfortunately, teachers and students seldom communicate explicitly about the role expectations they have for one another.

Role expectations are, however, communicated in two basic ways. First, there are direct instructions, typically, by the teacher. A syllabus is often the source of these instructions. Second, and generally more powerful, are verbal and non-verbal actions in the classroom that attempt to influence the students' or the instructor's behavior. For example, students attempt to influence instructors to lecture by sitting passively during class. Or, instructors attempt to influence students to sit passively by not recognizing students with questions. What do you do to attempt to influence the behavior of your students? What do they do to attempt to influence your behavior?

Again, as with all communication, it is the expectation that is perceived rather than that which is intended which influences behavior (Ibid.). This fact stresses the importance of making expectations explicit.

The next step is to eliminate as much conflict between expectations as possible. Typically conflict occurs when expectations are incompatible, for example, when a teacher expects students to take notes and discuss during class. Or conflict may occur when the expectations of an instructor are beyond the capabilities of the students, for example, when an instructor expects students to discuss material that is not clearly understood by them.

Students also find themselves overloaded so that he/she cannot complete all of the tasks urged by various people within the stipulated time limits and requirements of quality. This is a particularly debilitating type of conflict.

Clarifying expectations and reducing conflict involved increases the likelihood that students, individually, will meet those expectations. The next factor involved in students' participating in classroom activities involves the behavior of people in groups.

Group Behavior in the Classroom

Most classroom situations in which students actively participate involve a group task or problem to be solved. As students participate in these activities, the classroom takes on the characteristics of a group situation.

Those who study the behavior of people in groups have found that in most successful group situations, two types of needs must be met. First, the group must progress toward a solution to its

problem. This type of activity is called task behavior. Second, the group feeling must be strengthened and maintained. This type of activity is called maintenance behavior (Bradford, 1961). For the group situation to be productive, there must be a balance of task and maintenance behavior and a minimum of dysfunctional behavior. It is important to note that dysfunctional behavior is an indication that the group activity is not satisfying individual needs.

The following is a list of group behaviors isolated by the National Training Laboratory. As you look over the list think of examples of these behaviors that are exhibited in your classroom.

Task Behaviors - involving the selection and completion of a group task:

Initiating Activity - defining the task, proposing solutions, suggesting approaches to the task, organizing the material

Seeking Information - asking for clarification of suggestions, requesting information

Seeking Opinions - seeking expression of opinion about something, seeking clarification of values, suggestions, or ideas

Giving Information - offering facts or generalizations, relating experience to the problem

Giving Opinion - stating beliefs concerning an idea, value or question

Elaborating - clarifying, offering examples, developing meaning, projecting on the adoption of a proposal

Coordinating - pointing out relationships among ideas or suggestions, pulling ideas and/or suggestions together, drawing

together activities of sub-groups or members

Summarizing - pulling related ideas or suggestions together, restating suggestions following discussion

Evaluating - submitting decisions or accomplishments for comparison to group standards, comparing accomplishments to goals

Diagnosing - determining sources of difficulties, determining next steps, analyzing blocks to progress

Testing for Concensus - checking on group opinions, checking on whether the group is nearing concensus

Maintenance Behaviors - involves building and maintaining group activity:

Encouraging - being friendly, warm, responsive to others, praising, agreeing, accepting contributions of others

Gate-keeping - facilitating contributions of other group members

Standard Setting - expressing group standards of procedure or evaluation, restating standards

Following - going along with group decisions, accepting ideas of others

Expressing Group Feelings - summarizing understanding of group feeling, describing reactions of the group

Mediating - harmonizing, conciliating differences, offering compromise solutions

Relieving Tension - easing tension through humor, providing perspective for a tense situation

Disfunctional Behaviors - involves actions that do not help and often hinder the function of a group:

Being Aggressive - criticizing or blaming others, showing

hostility toward the group or its members, deflating the ego or status of others

Blocking - interfering with the progress of the group, going off on a tangent, citing unrelated personal experience, arguing too much, rejecting ideas without consideration

Self-Confessing - using the group as a sounding board, expressing non-group-oriented feelings or points of view

Competing - vying with other group members

Seeking Sympathy - trying to induce group members to be sympathetic to one's problems, disparaging one's own ideas

Horsing Around - clowning, joking, disrupting group work

Seeking Recognition - attempting to call attention to one's self

Withdrawal - acting indifferent or passive, daydreaming, whispering to others, wandering from the subject

The group activities in the classroom will be more efficient if the instructor and the students work toward improving their roles in these activities. This can be done by: becoming aware of necessary behavior; becoming more aware of the degree to which they contribute to the group through their behavior; working at improving their skill in performing group behaviors; reducing the number of unproductive questions; and by reducing the amount of unnecessary verbiage (Bradford, 1961).

Feedback in the Classroom

Typically, students receive feedback about their performance in a course through examinations and other written assignments. This feedback gives students information about both how well they

are doing and what they need to do to be successful in their efforts. Students also need this type of information about their efforts in classroom participation. Constructive feedback will provide them with the ongoing guidance that many students need in order to be active classroom participants.

Consider the following list of characteristics of constructive feedback (Bergquist & Phillips, 1975) in relation to the feedback that you give to your students.

1. It is specific rather than general. To be told that one is "dominating" will probably not be as useful as to be told that "in the conversation that just took place, you did not appear to be listening to what others were saying, and I felt forced to accept your arguments."
2. It is focused on behavior rather than on the person. It is important that we refer to what a person does rather than to what we think or imagine he is. Thus we might say that a person "talked more than anyone else in this meeting" rather than that he is a "loud-mouth." The former allows for the possibility of change; the latter implies a fixed personality trait.
3. It takes into account the needs of both the receiver and giver of feedback. Feedback can be destructive when it serves only our own needs and fails to consider the needs of the person on the receiving end. It should be given to help, not to hurt. We too often give feedback because it makes us feel better or gives us a psychological advantage.
4. It is directed toward behavior which the receiver can do something about. Frustration is only increased when a person is reminded

of some shortcoming over which he has no control.

5. It is well-timed. In general, feedback is most useful at the earliest opportunity after the given behavior (depending, of course, on the person's readiness to hear it, support available from others, and so forth). The reception and use of feedback involves many possible emotional reactions. Excellent feedback presented at an inappropriate time may do more harm than good.
6. It involves sharing of information, rather than giving advice. By sharing information, we leave a person free to decide for himself, in accordance with his own goals and needs. When we give advice we tell him what to do, and to some degree take away his freedom to decide for himself.
7. It involves the amount of information the receiver can use rather than the amount we would like to give. To overload a person with feedback is to reduce the possibility that he may be able to use what he receives effectively. When we give more than can be used, we are more often than not satisfying some need of our own rather than helping the other person.
8. It concerns what is said and done, or how, not why. The "why" takes us from the observable to the inferred and involves assumptions regarding motive or intent. Telling a person what his motivations or intentions are more often than not tends to alienate the person and contributes to a climate of resentment, suspicion, and distrust; it does not contribute to learning or development. It is dangerous to assume that we know why a person says or does something, or what he "really" means, or what he is "really"

trying to accomplish. If we are uncertain of his motives or intent, this uncertainty itself is feedback, however, and should be revealed.

9. It is checked to insure clear communication. One way of doing this is to have the receiver try to rephrase the feedback he has received to see if it corresponds to what the sender had in mind. No matter what the intent, feedback is often threatening and thus subject to considerable distortion or misinterpretation.
10. It is followed by attention to the consequences of the feedback. The person who is giving feedback may greatly improve his helping skills by becoming acutely aware of the effects of his feedback. He can also be of continuing help to the recipient of the feedback.
11. It is an important step toward authenticity. Constructive feedback opens the way to a relationship which is built on trust, honesty, and genuine concern. Through such a relationship, you can achieve one of the most rewarding experiences that one can achieve and will have opened a very important door to personal learning and growth.

With these characteristics in mind, what do you need to do in order to make your feedback more constructive?

Alternatives for Student Participation

The following is a list of commonly used teaching methods based on student participation.

1. Class Discussion

Class discussions are initiated and led by the teacher. He/she exercises a good deal of control over the direction of the discussion.

All students are expected to participate and often are asked to contribute in turn, in order to begin the discussion. It is most appropriate for dealing with specific topics or questions.

A major limitation of this method is that it is effective in classes of twenty students or less. The material for the discussion must be carefully planned to allow for some clear focus.

2. Small Group Discussion

Small group discussions are initiated by the teacher and are conducted by small groups (three or four) of students. They deal with a specific issue or question for a short period of time (five to ten minutes). These discussions are most appropriate for dealing with very specific topics or questions.

Small group discussions are effective when the directions and the topic for discussion is clear to the students.

3. Panel Discussion

This method involves a selected group of students who discuss an issue in front of the entire class. The class joins in the discussion after a set period of time. It is an effective way of stimulating discussion in larger classes.

This type of discussion may become emotional and the focus shifting from the content to the personalities of the panel members.

4. Symposium

This method involves a small group of persons who are well informed on various aspects of a particular topic. The members of the symposium give reports and respond to questions from the entire class. This is an effective alternative for presenting specific

information.

Like a panel discussion, the focus may shift from the content to the personalities of the speakers.

5. Debate

This is a pro-con discussion of controversial issues. The speakers attempt to convince the class of their point of view. It is most effective in dealing with issues with definitive sides.

A problem with debate is that objectivity is often difficult to maintain.

6. Reverse Thinking

In this technique students are asked to express their thoughts in reverse. It must be used in combination with other discussion methods. Reverse thinking helps students to gain insights into other points of view. It can, however, become confusing.

7. Role Playing

This involves selected members of the class acting out a situation or incident. It is particularly helpful in gaining insight into the dynamics of a situation. A limitation of this technique is that the actors may become self-conscious.

8. Brainstorming

This is a group problem-solving technique based upon creative thinking in a short period of time (five minutes). It is effective in generating numerous alternative solutions. The rules are: 1) the emphasis is on quantity, the more ideas, the better; 2) there is no evaluation of ideas, that can be done later; 3) offbeat ideas are welcome; and 4) taking off on others' ideas is encouraged. One

member of the class records the ideas.

Brainstorming must be used in conjunction with other discussion methods. It will not stand on its own.

9. Learning Cell

The learning cell involves a brief focused discussion between two students about particular reading assignments. The instructor provides several questions for the diads (cells) to discuss.

This is particularly effective for establishing the base for large group discussions.

10. Student-led Activities

All of the above methods may be led by students with the supervision of the teacher.

Exercise 1. Communication of Student Roles

The communication of student roles is an important step in facilitating participation. Considering that you expect to participate in classroom activities, then communicating your expectations to students is the starting point. Review the section on role behavior before doing this exercise.

Goal - to make explicit the types of behaviors expected of students in the class

Class Size - no limit

Class Time Required - approximately 10 - 20 minutes

Preparation

- a. List what you would like students to do in the classroom. Consider: Do you want students to ask questions? What kind of questions (clarity, challenging, application, etc.)? How much time do you want to devote to student participation?
- b. Review your list noting the benefits of these behaviors ... to you ... to the students. Cross off any behaviors that seem inappropriate.
- c. List the behaviors you feel that students will want to exhibit. Consider this list in terms of the benefits to students ... to you. Check the behaviors you feel are inappropriate.
- d. Combine from the two lists the behaviors that you feel are appropriate and realistic for your course.

Class Activity

- a. At the beginning of a class session, as early in the semester as possible, explain your expectations and their rationale to students, i.e. you expect them to ask questions when they do not

understand the material, so that you will know what they are having difficulty with and that they will be clear about the material.

Following this explanation ask students for their reactions to your expectations. Be prepared to respond to a variety of reactions, i.e. one student not wanting to take class time discussing material and another feeling that the discussion will be helpful.

At the end of this discussion, summarize your expectations and student reactions.

- b. At the beginning of subsequent classes, stress the behaviors that you think will be most productive for that particular class session.
- c. During class sessions, reinforce students for acting in the ways you have encouraged. The frequency of reinforcement may be diminished, but not discontinued, as students exhibit the behaviors more frequently.

Feedback

- a. When you introduce your expectations, ask students whether or not they feel the expectations are reasonable in light of your objectives and their objectives for the course. Also ask what you can do to help the students meet your expectations.
- b. In the class following the introduction of your expectations, ask students to write the answers to the following questions:
 - 1) What are students expected to do in this class?
 - 2) Do these expectations aid or hinder your learning in this course? How?
 - 3) What could you do in the classroom to improve your learning in this course?

The responses should be anonymous.

Review the responses to these questions and consider any adjustments that may be necessary.

Summarize the results for the class as soon as possible.

Exercise 2. General Discussion Exercise

This exercise addresses a basic method for generating classroom participation. It provides for a wide range of possibilities for content and/or direction. This type of discussion is appropriate in a variety of academic disciplines.

Goals - McKeachie, 1969, compiled the following goals for the process of class discussion:

- to make use of the resources of class members;

- to obtain feedback on how well instructional objectives are being met;

- to give students an opportunity to practice thinking in terms of the subject matter;

- to provide students with feedback about their logic and position;

- to help students in processing information presented in course materials;

- to counter student dissonance regarding course materials;

- to foster student motivation for learning the course material.

Class Size - up to twenty-five students

Class Time Required - ten minutes of in-class preparation and one regular (50 minutes) class session during which ordinary content will be dealt with.

PreparationInstructor

- a. Choose two of the process goals listed under "Goals"
- b. Decide upon the content for the discussion; it must be broad enough to support a discussion at the same time being narrow enough to be manageable in the scheduled time. For example, how did black voters influence the 1976 presidential election; or, what precautions are necessary when producing recombinant DNA?
- c. Review material for discussion anticipating questions and/or comments from students.

Students

- a. Announce the discussion to students in advance allowing them adequate time to prepare. Tell them:
 - i. what the material and scope of discussion are;
 - ii. that you expect them to prepare questions or comments for the discussion, giving examples;
 - iii. that they are expected to ask and respond to those questions or comments;
 - iv. that you expect to be primarily a facilitator in the discussion.
- b. Tell students that you are trying out this exercise and will be seeking feedback about it.
- c. Remind students of the discussion at the end of the class immediately prior to the discussion by reviewing the assignment.

In-Class Activity

Introduction - restate the assignment stressing your and the

students' roles.

Procedure

a. Ask students to summarize the material. One student should make a summary point, then another, until the summary is complete (call on someone if there are no volunteers). 5 - 7 minutes

(Note: limit your input to the content of the summary; you are the facilitator.)

b. Ask a student for one of the questions or comments prepared for the discussion (if necessary, restate to insure common understanding) asking members of the class to respond or react.

(Your job here is to get students to contribute and to keep the discussion moving. Allow them to provide the content.)

c. When an issue has been exhausted or there is concensus, repeat a., beginning with another student; repeat this procedure until there are 10 minutes remaining in the class session.

Summary

a. Restate the major issues of the discussion.

b. Restate any questions arising from the discussion.

c. Provide any appropriate perspective on the discussion.

d. Suggest sources of follow-up, if appropriate. 5 minutes

Feedback

a. Ask students to write the answers to the following questions: 5 minutes

i. did the discussion meet your content objectives (list)?

ii. what were the positive and negative points of the process of discussion?

iii. what was their reaction to the discussion?

- b. Following class, compare the students' responses to your reactions.
- c. Summarize their responses in the class following the exercise.

Exercise 3. Problem Solving Groups

Problem solving and critical thinking are endeavors which are highly valued by many instructors. This exercise helps to structure these activities.

Goal - to provide a situation in which students can develop their problem solving skills

Class Size - up to forty students

Class Time Required - approximately 30 - 40 minutes during which regular content will be dealt with

Preparation - After reading through this exercise, prepare a clear, concise statement of the problem and clear objectives for the groups.

In-Class Activity

Introduction - Tell the class that you are trying out a problem solving exercise and will want some feedback at the end.

Procedure

- a. Ask students to break up into groups of four.
- b. Tell them that each group must choose a recorder whose job it is to maintain the focus of group on solving the problem, to record and report for the group.
- c. Check to see if the recorders understand their task.
- d. State the problem, the objectives, procedure, if appropriate, and that they have 10 minutes to work on it.
- e. At the end of the allotted time ask all of the recorders to report unless there is agreement among groups. 5 - 10 minutes

Summary

- a. Summarize the reports in a general manner, focusing on the entire class.
- b. Offer constructive feedback about the class' effort, including strong and weak points of their solutions. 5 minutes

Feedback

- a. Ask students to write the answers to the following questions:
 - i. was the group effective in dealing with the problem?
 - ii. what were the strengths and weaknesses of the group?
- b. Following class, compare student responses to your reactions.
- c. Summarize the responses in the class following the exercise.

Exercise 4. Small Group Discussion

Small group discussions are worthwhile for both generating participation and for breaking up longer activities into more manageable blocks of time.

Goals - to provide a situation in which all students in a class may participate in a discussion

Class Size - no limitation

Class Time Required - 20 - 25 minutes

Preparation

- a. After reading through this exercise, choose a topic from an upcoming class, one that is specific enough to provide focus, and general enough to allow for discussion.
- b. Prepare a clear statement of the issue.

In-Class Activity

Introduction - When you have covered the topic of the discussion in your usual manner, tell the students that you are trying

out a discussion exercise and would like some feedback about it at the end.

Procedure

- a. Tell the students to break into groups of three or four each.
- b. Tell them that you want them to discuss the topic you prepared for five to ten minutes.
- c. When you are satisfied that the class understands what they are to do, have the discussion begin. a, b, & c - 2½ minutes
- d. When the time has passed, or the discussion has diminished, call for the attention of the groups.
- e. Ask for brief summaries of several groups' discussions. 5 minutes
- f. Briefly summarize the important issues raised, giving the class as a whole constructive feedback on their efforts. 5 minutes

Feedback

- a. At the end, ask the students what they liked and disliked about the activity. 5 minutes
- b. Compare their responses to your perceptions when you review the activity after class.

Exercise 5. Panel Discussion

Panel discussions give students an opportunity to learn and practice a variety of skills, from critical thinking to presenting a position to questioning an expert. It has potential for being an exciting classroom activity.

Goal - to provide a situation in which students have responsibility for presenting the content of a class

Class Size - 15 or more

Class Time Required - 10 minutes to announce the activity, and one class session (50 to 75 minutes, if longer, limit to one hour)

Preparation - Instructor

- a. Choose a topic for the panel from the content of the course; it should have several aspects and/or points of view.
- b. Prepare a handout with a concise statement of topic including a brief summary of the various aspects and/or points of view.

In-Class Activity - Introduction

- a. With 10 minutes remaining in the class in which you present the material that the panel will be based upon, distribute the handout.
- b. Tell the class that you are trying out a panel discussion exercise and need 4 - 7 volunteers to represent the aspects of the topic on the panel; and that those students would need to do some preparation for the discussion. (A reward would help inspire volunteers.)
- c. Explain to the class the procedure for the discussion and that they all need to be familiar with the topic.
- d. Announce that the panel will take place in one week.

Preparation - Students

- a. Meet with panel members following the class in which you announce the activity. Explain to them that they are to represent a point of view, or aspect, of the topic and that they should be familiar with the course material related to the topic. If available, provide additional resources.
- b. Tell panel members that they should be prepared to make a 2 to 3 minute statement summarizing their perspective or aspect

and to answer questions about and defend their position.

c. Make sure that the panel knows what to do.

In-Class Activity

Procedure

a. Begin by reviewing the procedure, re-stating the topic of the discussion; point out your role as moderator. 2 minutes

b. Introduce the panel and proceed with each member making his/her prepared statement. 15 minutes

c. Following the statements, open the discussion to the class. Questions or comments may be addressed to either individuals or the entire panel. Panel members may question or direct comments to each other. As moderator, direct questions and/or comments to appropriate panel members. 25 minutes

Summary

a. With 10 minutes remaining, summarize the important outcomes of the discussion and provide appropriate perspective.

b. Give the class as a whole constructive feedback about their efforts. a & b - 5 minutes

Feedback

a. With 5 minutes remaining in the session, ask the students to write the responses to two questions:

i. what did you like and dislike about the discussion?

ii. what did you gain from the discussion?

b. Collect the responses and compare them to your perceptions.

c. Summarize the responses in the class following the activity.

d. Meet with the panel for several minutes following the activity.

Give them constructive feedback on their performance as a group.

Exercise 6. Monitoring Classroom Behaviors

Monitoring classroom behaviors can provide information about who is doing what in the classroom. The assumption is that focusing one's attention on increasing or decreasing specific behaviors is an effective technique for change. This exercise is a means of focusing on some classroom behaviors.

Goals

The general goal for this exercise is to provide comparison data about the frequency of certain classroom behaviors.

- A. to provide data about the direction of student statements;
- B. to provide data about the direction of instructor statements;
- C. to provide data about the topic on a content/procedure dichotomy of student statements;
- D. to provide data about student attention throughout the class session.

Class Size - up to twenty-five students

Class Time Required - five to ten minutes in three or four class sessions

Preparation

Instructor

- a. Read through the entire exercise and choose the option (A, B, C, or D) you think will be most helpful to you;
- b. Prepare tally and record sheets for the option you have chosen;
- c. Schedule the first observation and note the date in the appropriate space on the record sheet; the second observation will be on the next class date; the third will be on the fourth class after the first observation; the fourth should

- be scheduled nine meetings after the first observation;
- d. Choose a student in the class whom you think will be a good observer and discuss the exercise with him/her.

Observer

- a. The observer should be clear on his/her understanding of the procedures of this exercise;
- b. Prior to the class time the observer should sit in a position that will allow maximum sight of the entire class, while being as unobtrusive as possible.

In-Class Activity

Observation

Instructor - proceed as usual

Observer

- Options A, B, or C - a. make a mark (1) in the appropriate space on the tally sheet for each statement (a distinguishable verbalization made by a person in the class);
- b. at some point during the class count the total number of students in class;
- c. at the end of the observation (1 hour maximum) total the marks in each space and circle the total (T), return the tally sheet to the instructor.
- Option D - a. at 10 minute intervals make a mark (1) in the appropriate column for each student in the class;
- b. at the end of the observation total the marks in each space and circle the total (T), return the tally sheet to the instructor.

Feedback

- a. Review (out of class) the tally sheet and note totals on record sheet; the review should be done by considering the following: i. - a value judgement about the data can be made only in light of the goals of the class (how much participation do you want?); ii. - what behaviors would you like to increase? . . . ; decrease; iii. - what are acceptable numbers? (It would be helpful to note some target figures.); iv. - who can do what to improve?
- b. In the class following the observation, write the data summary on the chalkboard and discuss it in light of your goals for participation in the class, and recognizing that both you and the students are responsible for any change. Specific suggestions for improvement should be entertained. (5 to 10 minutes).

Repeat the observation, review, and feedback on the scheduled dates.

Option A. Direction of Student Statements

Tally Sheet

I	I	I	I	I	I
	S	S	S	S	S
I	I	I	I	I	I
	S	S	S	S	S
I	I	I	I	I	I
	S	S	S	S	S
I	I	I	I	I	I
	S	S	S	S	S
I	I	I	I	I	I
	S	S	S	S	S

Total: n = I = S =

Statement - a distinguishable verbalization made by a student

To Instructor (I) - the statement is directed to the instructor

To Other Students (S) - the statement is directed to another student

Record Sheet

Date				
To Instructor				
To Other Students				
Total Students				

Comments:

Observation 1 -

Observation 2 -

Observation 3 -

Observation 4 -

Option B. Direction of Instructor Statements

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Tally Sheet

To Class in General

	C							Total C = Q =
	Q							
To Specific Student	C	C	C	C	C	C	C	n = C = Q =
		Q	Q	Q	Q	Q	Q	
	C	C	C	C	C	C	C	
		Q	Q	Q	Q	Q	Q	
	C	C	C	C	C	C	C	
		Q	Q	Q	Q	Q	Q	
C	C	C	C	C	C	C		
	Q	Q	Q	Q	Q	Q		

Statement - a distinguishable verbalization made by the instructor

Questions (Q) - interrogative statements eliciting a response (not rhetorical questions); "Could you tell me ...?", etc.

Comments (C) - other statements made by the instructor

To Class in General - the statement is not directed to any particular student

To Specific Student - the statement is clearly directed to a specific student

Record Sheet

Date					
To Class	Q				
	C				
To Specific	Q				
	C				
Student					
n =					

Comments:

Observation 1 -

Observation 2 -

Observation 3 -

Observation 4 -

Option C. Types of Student Statements

242

Tally Sheet

C	C	C	C	C	C
	P	P	P	P	P
C	C	C	C	C	C
	P	P	P	P	P
C	C	C	C	C	C
	P	P	P	P	P
C	C	C	C	C	C
	P	P	P	P	P
C	C	C	C	C	C
	P	P	P	P	P

Total: n =

Content: Q =

Procedure: Q =

C =

C =

Statement - a distinguishable verbalization made by a student

Questions - interrogative statements eliciting a response (not rhetorical questions), mark a (Q) in the appropriate space for each question by a student

Comments - other statements by students, mark a (C) in the appropriate space for each comment by a student

Content - a student makes a statement about the subject matter of the class

Procedure - a student makes a statement about class activities

Record Sheet

243

Date				
Content	Q			
	C			
Procedure	Q			
	C			

Comments:

Observation 1 -

Observation 2 -

Observation 3 -

Observation 4 -

minute 10

A=

N=

minute 20

A=

N=

minute 30

A=

N=

minute 40

A=

N=

minute 50

A=

N=

minute 60

A=

N=

Attending(A) - the student is exhibiting facial expressions, gaze line , general posture, manual activity and body movement that indicate interest in and work orientation toward a learning task placed before him/her by the instructor(Fanslow, 1967).

Non-Attending(N) - the student is exhibiting facial expressions, gaze line, general posture, manual activity and body movements that do not indicate interest in and work orientation toward a learning task placed before him/her by the instructor.

Date					
Minute 10	A				
	N				
Minute 20	A				
	N				
Minute 30	A				
	N				
Minute 40	A				
	N				
Minute 50	A				
	N				
Minute 60	A				
	N				

Comments:

Observation 1 -

Observation 2-

Observation 3 -

Observation 4 -

Formative Evaluation of Skills for
Facilitating Student Participation

Formative evaluation of teaching skills involves the collection and analysis of data with the express purpose of providing direction for development efforts. This "formative" evaluation is analogous to the feedback to students discussed in a prior section of this booklet.

The explication and exercise sections focus upon three areas of skill which have direct impact on student participation. These areas are communication skills, group skills, and organization skills, and will be the focus of the evaluation."

Communication

The dimensions of communication skills to be considered are: "effectiveness" - as described in the explication section, pertaining to reaching mutual understanding between you and your students; and, feedback - soliciting and giving effective feedback to your students.

Organization

The dimensions of organization skills to be considered are: introduction - presenting and giving clear concise directions for an instructional activity; objectives - defining reasonable, clear objectives for learning activities; and, closure - integrating major outcomes of a learning activity and establishing links between the new and old material.

Group

The dimensions of group skills to be considered are: task - maintaining the progress of a group toward its objective; and,

maintenance - establishing and maintaining an effective group setting.

It is intended that you will design and conduct your own evaluation. There will, however, be a sample questionnaire included at the end of this section.

Sources of Data

There are several valuable sources of data for your assessing teaching skills. Each source has unique qualities and perspective but no one source is adequate in and of itself. Multiple data sources for assessing teaching skills (Melnik, 1972) have been found to be an effective approach (Erickson & Sheehan, 1974).

Students

Students are always an important source of information about teaching skills. When assessing skills for facilitating student participation, they are the most important source, for obvious reasons.

Observers

An observer who is not a part of the class can provide a unique perspective on what is happening in the classroom. The observer may be an instructional specialist, a colleague, or a student.

Technology

Audio or videotapes can record classroom activities in such a way as to provide for careful review.

Self

One's self is a source of data that should not be overlooked when evaluating your skills. Self-assessment in relation to other

sources is a powerful perception check.

Collecting Data

Collecting data will be facilitated by the use of a questionnaire that may be used by observers, students and self. A questionnaire used in this way will systematically focus the data on the specific dimensions to be evaluated. It may be made up of several different types of or combinations of questions. Each provides slightly different data.

Open-ended Questions

This type of question encourages the respondent to reply subjectively. Example: In what way does the instructor encourage you to participate in class activities?

Value Judgement Questions

A question of this type forces the respondent to make a value decision about your performance of a particular skill or behavior. Responses to this type of question are very easy to qualify.

Example: The instructor's ability to get students to participate in class discussions. Response choices: 1) No improvement is needed; 2) Little improvement is needed; 3) Improvement is needed; 4) Considerable improvement is needed; 5) Not a necessary skill or behavior for this course (Item #15 Teaching Analysis By Students © Clinic to Improve University Teaching, 1974).

Frequency Questions

This type of question asks the respondent to state the frequency of performance of particular behaviors. Frequency questions are also very easy to quantify. Example: The instructor gets me to

participate in class discussions. Responses: 1) Always; 2) Frequently; 3) Sometimes; 4) Never.

When designing your questionnaire decide first on which dimensions of facilitating student participation you wish to focus. Make a list of those dimensions and write a question for each. A combination of open-ended and other types of questions will provide for a range of data.

Distribute your questionnaire to students and have them fill them out during class. They should be allowed to remain anonymous so that their assessment is not biased by fear of retaliation. Ask your observer, if any, to complete the questionnaire following his/her observation. Complete a self-assessment using the questionnaire. Be sure that the questionnaires from different sources are kept separate.

Once you have quantified the responses where appropriate and taping, if any, has been completed you are ready to analyze your data.

Analyzing the Data

As you begin to analyze your data it is important to re-state the purpose of this evaluation. That purpose is to come to a decision as to which aspects of your skills for facilitating student participation are done well and which are in need of development. In order to arrive at those decisions it is necessary to consider all of the data (including self-reported data) in light of several questions.

Goals of Instruction

Are the goals of instruction reasonable and at an appropriate level of challenge for the students?

Instructional Activities

Are the activities appropriate in order to reach your goals?

What other activities would accomplish your goals?

Students' Skills

To what extent do you need to help the students to develop their "student" skills?

What level of participation is realistic to expect from your students?

Analysis

After reviewing all of the data independently and collectively, make a list of those aspects that are the strongest and those that are weakest, based on the data.

Prioritize the weak aspects considering what you feel has the greatest impact on your class.

Your ongoing development efforts should be based on this prioritized list. It is suggested that you focus on one aspect at a time beginning with the highest priority.

Please respond to the statements on this page with one of the following:

1. Always
2. Frequently
3. Sometimes
4. Never

Make any comments on the back of this page.

1. Students understand what the instructor says. _____
2. The instructor understands what the students say. _____
3. The instructor gives students helpful feedback about their classroom performance. _____
4. The instructor solicits feedback from students about his/her classroom performance. _____
5. The instructor gives clear directions for classroom activities. _____
6. The instructor makes clear the goals of classroom activities. _____
7. The goals of classroom activities are reasonable. _____
8. The instructor integrates the major outcomes of classroom activities. _____
9. The instructor establishes limits between new and old material. _____
10. Classroom discussions progress towards solutions or answers. _____
11. The classroom atmosphere is conducive to student participation. _____

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18 Black Rock Road
Cohasset, Mass. 02025

Dear

I would like to begin by thanking you for participating in the evaluation of the skill booklet, Facilitating Student Participation. I trust that the experience will be rewarding for you, in the development of skill in facilitating student participation in classroom activities; and for me in the completion of my dissertation project.

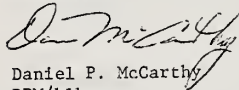
What you are involved in is a pilot test of the booklet. The test spans four weeks, beginning and ending with a short videotape of a class session in which active student participation is intended. During the four week test you are expected to: read the entire booklet, try out at least two of the exercises, gather feedback about your performance, and complete the evaluation form at the end of the booklet. The evaluation form will be collected at the time the post-test videotape is made.

The videotape recordings of your class are scheduled to be made on

at
in Room

If you have any questions, please call me collect at 617/383-0986. Again, thanks for the help.

Sincerely,



Daniel P. McCarthy
DPM/blh

Continuing development of this booklet is an integral part of its production. Your responses to the following items will provide information for that development. Your comments and suggestions are particularly important in this process.

Please respond to each item by making an X in the appropriate point on the continuum. The items refer to each section as a whole. Please make any comments or suggestions about a specific subsection or exercise on the back of the page.

This questionnaire will be collected at the time of the second videotape. Again, thanks for your help.

Section I - Explication

The information presented in this section is:

A. _____
clear 1 2 3 4 5 unclear

B. _____
relevant 1 2 3 4 5 irrelevant

C. _____
useful 1 2 3 4 5 not useful

comment:

Section II - Exercises

The exercises in this section are:

A. _____
clear 1 2 3 4 5 unclear

B. _____
relevant 1 2 3 4 5 irrelevant

C. _____
useful 1 2 3 4 5 not useful

comment:

The material presented in this section is:

A. _____
clear 1 2 3 4 5 unclear

B. _____
relevant 1 2 3 4 5 irrelevant

C. _____
useful 1 2 3 4 5 not useful

comment:

Booklet (overall)

The experiences provided through use of the booklet were:

_____ productive 1 2 3 4 5 unproductive

As a result of using this booklet student participation in classroom activities has:

_____ increased 1 2 3 4 5 decreased
not changed

As a means of developing skill in facilitating student participation, this booklet is:

_____ useful 1 2 3 4 5 not useful

comment:

Please comment on the next two questions on the back of this sheet.

What suggestions can you make for the improvement of this booklet?

Would you make use of booklets of this type that dealt with other teaching skills? _____ Yes _____ No

Comment.

APPENDIX G
TEACHER/STUDENT VERBAL
BEHAVIOR INSTRUMENT

Teacher/Student Verbal Behavior Instrument

The Teacher/Student Verbal Behavior Instrument (T/SVBI) was designed to describe the verbal behavior of teachers and students in post-secondary classroom situations. Verbal behavior is described in terms of the frequency and quality of statements in the classroom. Behavioral categories were drawn from the conceptualization analysis of the teaching skill, Facilitating Student Participation.

Facilitating Student Participation is defined as the practice or exhibition of behaviors that initiate, activate, or support active participation by students in classroom activities intended to produce particular learner outcomes. Participation is seen as facilitated when there is effective communication between the instructor and students, including clear definition of the role of the student in classroom activities, and effective feedback about their performance, and an environment conducive to group activity.

The purpose of the instrument is to provide descriptive and qualitative data on verbal classroom behavior. A Rating Form and a Comparison Form are included for this purpose.

Rater Qualifications

Raters should be adept at analyzing post-secondary instruction in terms of classroom behavior and at observing group process in a classroom situation.

Procedure

Technician

1. Arrive at the classroom in enough time to set up equipment in such a way as to maximize the view of all in attendance.
2. The videotape recording includes three five-minute segments of the class session:
 - a. five of the first ten minutes;
 - b. the five minute segment beginning thirty minutes after the scheduled start of class;
 - c. five minutes of the fourth quarter hour.
3. Pan the class at the start of each segment.
4. Make medium and medium-close shots of the speaker.

Raters

1. View tape, stopping when necessary to classify and rate each event.
2. Make a notation for each event in the appropriate space on the rating sheet.

Events

The coding unit is an event which is defined as a distinguishable question or comment with a single theme made by the instructor or a student in the class. There may be more than one event in the statements of a single speaker (i.e. a student answers the instructor's question and asks a question of the instructor).

Instructor Behavior

Communication

Establishing Understanding - the instructor makes a comment or asks a question which enhances mutual understanding of communications (i.e. "When I use the term energy source, I am referring to only those sources in commercial use at this point in time").

Seeking Feedback - the instructor seeks student comments or evaluation of classroom content, activity, or instructor behavior (i.e. "Do you feel that the small group discussions are a productive use of class time?").

Giving Feedback - the instructor makes a statement about student performance in classroom activities (i.e. "I think that, as a group, your assessment of the author is accurate, but I would like you to be more specific.").

Group

Task - the instructor makes a statement which helps to direct the progress of the group (instructor and students) towards its objective (i.e. "We've discussed the factors present at the start of the War. Now we need to consider how they each contributed to the

hostilities as we work towards some solutions that could have avoided armed conflict.").

Maintenance - the instructor makes a statement which helps to establish or maintain an effective group setting (i.e. "It seems that our discussions are most productive when all have a chance to express themselves.").

Organization

Introducing Activity - the instructor makes a statement presenting and/or giving directions for an instructional activity (i.e. "I would like to take five minutes and have you discuss that question in groups of three.").

Objectives and Expectations - the instructor states objectives and/or expectations for a classroom activity (i.e. "I would like you to be able to articulate your position on the issue, so it is important that you contribute to the discussion.").

Bringing Closure - the instructor makes a statement integrating major outcomes of classroom activity and/or establishes links between new and old material (i.e. "Today we have been talking about the characteristics of Shelly's poetry. Looking at the list we generated today and the characteristics of other Romantic poets we've covered, we see that Shelly was a strong force in the Romantic movement.").

Other

Extraneous - all statements unrelated to the content and process of the class session (i.e. "Did anyone see the ball game last night?").

Questions

Procedure - a student makes a statement seeking information about the procedure of classroom activity (i.e. "When we are in the small groups should one of us make notes on the discussion?").

Content - a student makes a statement seeking information about the content of classroom activity (i.e. "In our discussion can we include sources outside of our assignment?").

Clarity - a student makes a statement seeking clarity about communications (i.e. "I don't quite understand what you mean when you say power structure.").

Comments

Content - a student makes a statement concerning the content of an activity (i.e. "I thought that the author presented a narrow view of the subject.").

Feedback - a student makes a statement giving the instructor feedback about instructor behavior or the content of classroom activities (i.e. "Considering the economic factors helped me to better understand the issue.").

Procedure - a student makes a statement about the procedure of classroom activity (i.e. "The panel discussion was a good way to consider the topic in depth.").

Other

Extraneous - All statements unrelated to the content and process of the class session (i.e. "Who is going away during vacation?").

Facilitating - the event is clearly helpful to most students' participation in classroom activity.

Somewhat Facilitating - the event is somewhat helpful to students' participation in classroom activity.

Neutral - the event has no influence on student participation in classroom activities.

Somewhat Inhibiting - somewhat discouraging to student participation in classroom activity.

Inhibiting - clearly discouraging to most students' participation in classroom activity.

Tape rating Form

Tape # _____

Facilitating	Somewhat Facilitating	Neutral	Somewhat Inhibiting	Inhibiting		
					Instructor Behavior	
					Communication	Establishing Understanding
						Seeking Feedback
						Giving Feedback
X	X	X	X	X		
					Group	Task
						Maintenance
X	X	X	X	X		
					Organization	Introducing Activity
						Stating Objectives and Expectations
						Bringing Closure
X	X	X	X	X		
						Extraneous
X	X	X	X	X		
						Student Behavior N=
					Questions	Procedure
						Content
						Clarity
X	X	X	X	X		
					Comments	Content
						Feedback
						Procedure
X	X	X	X	X		
						Extraneous
Facilitating	Somewhat Facilitating	Neutral	Somewhat Inhibiting	Inhibiting		

Pre-Post Comparison Form

Instructor _____ Pre-tape # _____ Date _____

Post-tape# _____ Date _____

		Facilitating	Somewhat Facilitating	Neutral	Somewhat Inhibiting	Inhibiting	Total
Instructor Behavior							
Communication	Establishing Understanding						
	Seeking Feedback						
	Giving Feedback						
	Total						
Group	Task						
	Maintenance						
	Total						
Organization	Introducing Activity						
	Stating Objectives and Expectations						
	Bringing Closure						
	Total						
Extraneous							
Student Behavior N		X	X	X	X	X	X
Questions	Procedure						
	Content						
	Clarity						
	Total						
Comments	Content						
	Feedback						
	Procedure						
	Total						
Extraneous							

APPENDIX H
PRE-POST COMPARISON FORMS

Pre-Post Comparison Form

Instructor GROUP Pre-tape # Date Post-tape # Date

		Facilitating		Somewhat Facilitating		Neutral		Somewhat Inhibiting		Inhibiting		Total	
		C ₁	C ₂	C ₁	C ₂	C ₁	C ₂	C ₁	C ₂	C ₁	C ₂	C ₁	C ₂
Instructor Behavior													
Communication	Establishing Understanding	3	36	15	127	181	72	1	52	1	11	201	298
	Seeking Feedback	134	2	5	7	0	6	0	2	0	0	139	17
	Giving Feedback	0	3	2	11	1	8	0	2	0	0	3	24
	Total	137	41	22	145	182	86	1	56	1	11	343	339
Group	Task	0	3	5	14	1	2	0	2	0	0	6	21
	Maintenance	0	2	0	2	0	0	0	0	0	0	0	4
Total		0	5	5	16	1	2	0	2	0	0	6	25
Organization	Introducing Activity	0	0	0	6	14	12	0	0	0	0	14	18
	Stating Objectives and Expectations	0	0	0	4	16	8	0	1	0	0	16	13
	Bringing Closure	0	1	0	1	2	1	0	1	0	0	2	4
	Total	0	1	0	11	32	21	0	2	0	0	32	35
Extraneous		2	12	0	4	4	2	2	3	0	1	8	22
Student Behavior		X	X	X	X	X	X	X	X	X	X	108	101
Questions	Procedure	3	1	0	1	0	0	0	0	0	0	3	2
	Content	2	7	3	8	0	5	0	2	0	0	5	22
	Clarity	2	1	1	5	1	8	0	2	0	0	4	16
Total		7	9	4	14	1	13	0	4	0	0	12	40
Comments	Content	211	20	7	66	7	26	1	6	0	1	226	119
	Feedback	0	7	0	9	0	0	0	0	0	0	0	16
	Procedure	1	2	9	5	7	0	0	0	0	0	16	7
Total		212	29	16	80	14	26	1	6	0	1	242	142
Extraneous		0	11	0	8	2	2	0	0	0	0	2	21

Pre-Post Comparison Form

Instructor D Pre-tape # 263 Date 11/14Post-tape# 081 Date 12/12

		Facilitating		Somewhat Facilitating		Neutral		Somewhat Inhibiting		Inhibiting		Total	
		c ₁	c ₂	c ₁	c ₂	c ₁	c ₂	c ₁	c ₂	c ₁	c ₂	c ₁	c ₂
Instructor Behavior													
Communication	Establishing Understanding	0	14	4	22	20	5	0	7	0	1	24	49
	Seeking Feedback	10	0	0	0	0	0	0	0	0	0	10	0
	Giving Feedback	0	0	0	1	0	0	0	0	0	0	0	1
	Total	10	14	4	23	20	5	0	7	0	1	34	50
Group	Task	0	0	0	0	0	0	0	0	0	0	0	0
	Maintenance	0	0	0	2	0	0	0	0	0	0	0	0
Total		0	0	0	2	0	0	0	0	0	0	0	0
Organization	Introducing Activity	0	0	0	0	0	5	0	0	0	0	5	0
	Stating Objectives and Expectations	0	0	0	1	0	1	0	0	0	0	0	2
	Bringing Closure	0	1	0	1	0	0	0	1	0	0	0	3
Total		0	1	0	2	5	1	0	1	0	0	5	5
Extraneous		0	2	0	1	2	2	1	2	0	1	3	8
Student Behavior		X	X	X	X	X	X	X	X	X	X	11	7
Questions	Procedure	0	0	0	0	0	0	0	0	0	0	0	0
	Content	0	0	0	0	0	0	0	0	0	0	0	0
	Clarity	0	0	0	0	0	0	1	0	0	0	0	1
Total		0	0	0	0	0	0	1	0	0	0	0	1
Comments	Content	10	2	0	7	0	6	0	0	0	0	10	15
	Feedback	0	0	0	0	0	0	0	0	0	0	0	0
	Procedure	0	0	0	1	0	0	0	0	0	0	0	1
Total		10	0	0	1	0	0	0	0	0	0	10	16
Extraneous		0	0	0	3	0	1	0	0	0	0	0	4

Pre-Post Comparison Form

Instructor E Pre-tape # 554 Date 11/16Post-tape# 869 Date 12/16

		Facilitating		Somewhat Facilitating		Neutral		Somewhat Inhibiting		Inhibiting		Total	
		E ₁	E ₂	E ₁	E ₂	E ₁	E ₂	E ₁	E ₂	E ₁	E ₂	E ₁	E ₂
		Instructor Behavior											
Communication	Establishing Understanding	0	6	0	1	0	0	0	0	0	0	0	7
	Seeking Feedback	1	0	0	0	0	0	0	0	0	0	1	0
	Giving Feedback	0	1	1	0	1	0	0	0	0	0	2	1
	Total	1	7	1	1	1	0	0	0	0	0	3	8
Group	Task	0	3	0	2	0	0	0	0	0	0	0	5
	Maintenance	0	2	0	0	0	0	0	0	0	0	0	2
	Total	0	5	0	2	0	0	0	0	0	0	0	7
Organization	Introducing Activity	0	0	0	3	1	0	0	0	0	0	1	3
	Stating Objectives and Expectations	0	0	0	1	12	0	0	0	0	0	12	1
	Bringing Closure	0	0	0	0	1	0	0	0	0	0	1	0
	Total	0	0	0	4	14	0	0	0	0	0	14	4
Extraneous		2	9	0	0	0	0	0	0	0	0	2	9
Student Behavior		X	X	X	X	X	X	X	X	X	X	16	22
Questions	Procedure	3	0	0	0	0	0	0	0	0	0	3	0
	Content	1	4	3	1	0	0	0	0	0	0	4	5
	Clarity	1	0	0	1	0	0	0	0	0	0	1	1
	Total	5	4	3	2	0	0	0	0	0	0	8	6
Comments	Content	80	10	0	12	0	5	0	4	0	0	80	31
	Feedback	0	3	0	1	0	0	0	0	0	0	0	4
	Procedure	1	0	0	4	0	0	0	0	0	0	1	4
	Total	81	13	0	17	0	5	0	4	0	0	81	39
Extraneous		0	10	0	0	0	0	0	0	0	2	0	12

Pre-Post Comparison Form

Instructor H Pre-tape # 652 Date 11/17Post-tape# 266 Date 12/15

	Facilitating		Somewhat Facilitating		Neutral		Somewhat Inhibiting		Inhibiting		Total	
	E ₁	E ₂	E ₁	E ₂	E ₁	E ₂	E ₁	E ₂	E ₁	E ₂	E ₁	E ₂
Instructor Behavior												
Communication												
Establishing Understanding	0	11	6	24	40	3	1	0	0	0	47	38
Seeking Feedback	57	2	0	6	0	0	0	0	0	0	57	8
Giving Feedback	0	2	1	0	0	0	0	0	0	0	1	2
Total	57	15	7	30	40	3	1	0	0	0	105	48
Group Task	0	0	2	2	0	0	0	0	0	0	2	2
Maintenance	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	2	0	0	0	0	0	0	2	2
Organization												
Introducing Activity	0	0	0	0	0	4	0	0	0	0	0	4
Stating Objectives and Expectations	0	0	0	0	0	0	0	0	0	0	0	0
Bringing Closure	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	4	0	0	0	0	0	4
Extraneous	0	1	0	1	1	0	1	0	0	0	2	2
Student Behavior											8	12
Questions												
Procedure	0	0	0	1	0	0	0	0	0	0	0	1
Content	1	0	0	0	0	0	0	0	0	0	1	0
Clarity	0	0	0	1	0	0	0	0	0	0	0	1
Total	1	0	0	2	0	0	0	0	0	0	1	2
Comments												
Content	72	6	0	30	0	6	0	0	0	1	72	43
Feedback	0	0	0	0	0	0	0	0	0	0	0	0
Procedure	0	0	0	0	0	0	0	0	0	0	0	0
Total	72	6	0	30	0	6	0	0	0	1	72	43
Extraneous	0	1	0	5	2	1	0	0	0	0	2	7

APPENDIX I
COMMENTS OF PILOT TEST PARTICIPANTS

Section I - Explication

Found discussion of "behaviors" and "constructive feedback" most enlightening.

The only reason I give a 2 for usefulness is that much of the information is well known to me, as I am in the behavioral sciences.

Section II - Exercises

Exercises were easily implemented, however, I am still unsure of whether or not they help to increase learning ability.

Difficult to relate to Math, Science or technology courses.

I often (not always, I must admit) do many of the things you suggest.

Section III - Evaluation

I found the evaluation process to be highly time-consuming.

Evaluations more useful than exercises.

I have reservations about the usefulness of student evaluations.

Booklet (overall)

I use the same activities with other classes and they are productive and useful. This class they did not seem to effect.

What I thought were to be brief and simple exercises proved quite complex and time consuming. The sociological jargon throughout all but the first few pages, I found forbidding and pretentious.

What suggestions can you make for the improvement of this booklet?

Would be a little clearer if more use were made of paragraph headings in the middle portion of the book, pp. 5 - 11.

There are not many suggestions I have to make. The book is clearly written, well organized and instructional.

Section II - Exercises I thought could be clarified, esp. with more examples and/or illustrations.

Suggestions for improvement of booklet: Being completely ignorant of basic teaching-educational methods which are espoused on the academic level, I have no background for comparison. However, I found the booklet highly informative and the exercises well defined, although not terribly innovative. Is it not possible that the booklet is undertaking an overly-burdensome task by trying to pass on so much information and numerous exercises and evaluations on but one facet of classroom teaching? Would it not be better to concentrate on one influencing factor (for instance, "behaviors" or "constructive feedback")? Perhaps the attitude of mine is influenced by the seemingly short period of time (4 weeks) which was given to assimilate this information.

Simplify, shorten, and more clearly distinguish the exercises.
Avoid all educationalese. The whole project sounds pretentious
and patronizing.

More attention could be directed toward analyzing student participation
in a more formal setting (e.g., lecture). Can student interest
be assessed? Recognition of key concepts? etc.

Would you make use of booklets of this type that dealt with other
teaching skills?

I would use them. Needs time to be thought about and digested.
Also time to prepare appropriate changes in style and in teaching
materials.

Possibly.

From my perspective class participation and critical discussion
is an important objective and I would like to see more in this
regard. Grading and evaluation of students of the teacher also
could be of interest.

It would depend on the subject matter. Personally, I would
rather have a workshop than read a booklet. However, workshops
being difficult to organize, I might read a booklet if I felt
my teaching was particularly weak in one area.

I encourage and enjoy student participation. I would like to
see other suggestions.

