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ABSTRACT

In spring 1986, Lincoln Land Community College (LLCC) initiated a program to provide part-time, off-campus instructors with the professional support required to improve teaching effectiveness. The plan involved training 14 "master teachers" to function as evaluators of part-time, off-campus instructors. Master teachers have a minimum of 5 years of "successful" teaching experience (i.e., they received excellent/superior ratings on student and administrative evaluations). During the academic year, each part-time, off-campus instructor is visited by an evaluator with expertise in the evaluatee's discipline. The evaluator rates the observed teaching behaviors and prepares a summary of the instructor's teaching strengths and weaknesses. After the evaluation, the evaluator confers with the evaluatee to construct a plan for teaching improvement. Following a review of the program, the bulk of the paper consists of seven sections with guidelines for improving instructional effectiveness in the classroom. These sections include: (1) "On Excellence in Teaching"; (2) "Creating a Climate for Learning"; (3) "Effective Classroom Observation Techniques"; (4) "Motivating Students"; (5) "The Feedback Lecture," including strategies for teaching listening and notetaking skills, sample discussion questions, and lecture outlines; (6) "Effective Discussions," reviewing affective learning objectives, and tactics for questioning and promoting student participation; and (7) "The Question," including methods for developing probing questions and tactics for fielding student responses and student questions. (PAA)

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SEATTLE, WASHINGTON
April 22-25, 1990**

ROUNDTABLE #19

**PART-TIME, OFF-CAMPUS INSTRUCTORS:
A SUPPORT PROGRAM FOR IMPROVING TEACHING EFFECTIVENESS**

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**ROUNDTABLE #19
PART-TIME, OFF-CAMPUS INSTRUCTORS:
A SUPPORT PROGRAM FOR IMPROVING TEACHING EFFECTIVENESS**

In the spring of 1986, Lincoln Land Community College formally initiated a program designed to provide part-time, off-campus instructors with the professional support they require to improve in teaching effectiveness. Expressions of need for such a support program by full-time and part-time faculty convinced college administration that a carefully planned, timely executed support program would be rewarded by the willingness of faculty to participate in the program and to commit themselves to its success. The plan called for the training of 14 Lincoln Land Community College master teachers to function as evaluators for part-time, off-campus instructors. During the academic year, each part-time, off-campus instructor is visited by a team evaluator with expertise in the evaluatee's discipline. The evaluator rates observed teaching behaviors with a valid and reliable instrument, and prepares a summary of the instructor's teaching strengths and weaknesses. Following the observation, the evaluator confers with the evaluatee in the spirit of a helping relationship. In a dialogue between evaluator and evaluatee, a plan for teaching improvement is constructed.

Planning the Program

Recognizing the importance of the educational delivery system to the success of the college mission, Lincoln Land Community College administration has assigned the highest priority to the selection, evaluation, reward, and development of instructors whether they be contractual or part-time, on-campus or off-campus. However, structuring a plan for the regular evaluation and professional development of more than 150 part-time instructors teaching at 31 off-campus sites proved a complex task.

The administration, committed to providing support services to part-time, off-campus instructors, recognized the need for careful planning to assure the success of the new program. Some of the more challenging and complex problems faced by the planners were the following:

- * Documenting the need for the program;

- * Surveying the literature regarding the practices among community colleges with respect to evaluation/support programs for part-time, off-campus instructors;
- * Gaining commitment to the program from all college constituencies;
- * Obtaining funding for the new program -- monies for developing materials for the program, for additional clerical help, for needed equipment, for implementing a master-teacher training program, for stipends and travel expenses for the evaluation team.....
- * Developing a handbook for evaluators delineating methods and procedures of evaluation, with support materials describing best teaching practice at the community college;
- * Planning a training program for evaluators;
- * Planning an orientation program to introduce the new evaluation program to the part-time faculty;
- * Identifying field-tested, valid and reliable instruments for the formative (see footnote) evaluation of part-time instructors;
- * Planning methods and procedures for the meta-evaluation of the program.

A survey of the literature provided much argument from academicians, in particular, that the growing number of part-time faculty pose a potential threat to the integrity and quality of the community college. By 1980 more than a quarter million part-time faculty were employed in American colleges and universities (NCES, 1980). The largest number of these part-timers are employed by community colleges where they now typically outnumber full-time faculty. At Lincoln Land Community College, part-time instructors out-number full-time instructors two to one.

The concerns of the college in selecting, evaluating, and developing a high quality part-time faculty are magnified with respect to part-time faculty off-campus. Their relative isolation from the main campus presents formidable obstacles to their development and growth in teaching excellence. For example, part-time, off-campus instructors do not benefit from regular interaction with instructors within the discipline, nor are they conveniently accessible to many of the support services enjoyed on the main campus. In fact, most part-time,

- * The term, formative, as used in this text refers to evaluation whereby specific teacher behaviors are examined as they relate to the criterion measure, teaching effectiveness.

off-campus instructors visit the main campus no more than once or twice a year during their teaching term, usually to attend an orientation or a professional development meeting. Meetings within divisions or disciplines seldom include part-time instructors. Although student evaluation has been conducted in all classes on campus and off campus since the earliest days of the college, evaluation by a professional observer in the classroom has been limited to on-campus instructors.

College perception of the relative isolation of the off-campus instructor has been confirmed by the Instructor Satisfaction Questionnaire administered each term to part-time instructors since 1984. Consistently, part-time instructors have ranked the lack of professional contact with colleagues within their respective disciplines among their greatest concerns.

The Role of the Administration

Interested in developing and maintaining teaching excellence off campus as well as on campus, the Board of Trustees asked the administration to investigate the feasibility of providing professional evaluators for part-time instructors teaching off campus. Their concern was maintaining consistency in course content and in teaching quality. For some time, a formal support system and a comprehensive evaluation program has been in effect on campus for both full-time and part-time instructors. The Board reasoned that these same support services should be extended to part-time off-campus instructors as well.

Several difficulties faced the administration in the process of developing a workable program. Securing funds for the new program proved a challenging problem. Unlike some funding requests that essentially pay their own way after implementation, this program would generate no revenue. Instead, the development, implementation, and continued maintenance of the program required a commitment from administration and Board to provide funds as an investment in teaching excellence.

Another potentially controversial issue involved the selection of the "master" teachers. It was ultimately decided that the basic criteria for candidates would be developed and that an open invitation would be extended to all faculty. Those faculty who perceived they met the criteria for selection and who were genuinely interested in participating in the pilot project were invited to reply. Nearly all faculty who applied met the standards for selection. The number of classes scheduled off-campus in a discipline was the primary determiner for the selection of evaluators from the pool of qualified candidates. Fourteen evaluators were selected for the first team in September. It is anticipated that a second team will be trained in evaluation skills in a January workshop.

The Vice President, Academic Services is charged with the overall administration of the program. However, the Dean of Transfer and Part-Time Instruction has the major responsibility for developing and implementing the program.

The proposal submitted to the Board of Trustees for approval included the following:

1. Goals and objectives;
2. Qualifications for master teacher/evaluators;
3. Duties and responsibilities of evaluators;
4. Orientation and workshop for evaluators;
5. Program implementation;
6. Program evaluation;

Each of these topics is described briefly in the following pages.

1. Goals and Objectives of the Program

The goals and objectives of the part-time, off-campus evaluation support program are described as follows:

Goal: To provide part-time, off-campus instructors with formative evaluation information and professional support needed to improve in teaching effectiveness.

Objective 1: To provide a team of Lincoln Land Community College master teachers, trained in the techniques of performance evaluation, to work with part-time, off-campus instructors to improve in teaching effectiveness.

Objective 2: To establish an ongoing support system for part-time, off-campus instructors.

Objective 3: To provide evaluators with valid and reliable instruments that measure all factors of the criterion measure, teaching effectiveness.

Objective 4: To train off-campus evaluators in the techniques of effective conferencing.

Objective 5: To establish an administrative plan that will coordinate student evaluation and professional evaluator information.

Objective 6: To establish a system of oral and written feedback to evaluatees regarding their teaching strengths and weaknesses.

Objective 7: To conduct ongoing research with respect to the effectiveness of this program in improving in teaching performance of part-time, off-campus instructors.

2. Qualifications of Master Teacher Candidates

Qualifications for master teacher evaluators are as follows:

- * Minimum of five years successful teaching, defined as receiving excellent/superior evaluations--student evaluations, administrator evaluations, division chairperson evaluations.
- * Interest in improving teaching performance and student learning in their classes.
- * Willingness to work with part-time, off-campus instructors to improve teaching effectiveness in their disciplines.
- * Willingness to participate in the training workshop.
- * Willingness to commit themselves to observing and working with off-campus instructors.

3. Duties and Responsibilities of Evaluators

Duties and responsibilities of evaluators are described as follows:

- * To observe the instructor in the classroom, collect data, and complete the evaluation form.
- * Prepare a summary report analyzing the instructor's performance.
- * Confer with the observed part-time instructor regarding teaching strengths and weaknesses.
- * Assist the instructor in planning for teaching improvement in a positive, supportive environment.
- * Make himself/herself available to the evaluatee by telephone.
- * Refer the evaluated instructor to the appropriate dean if performance is unacceptable.

- * Participate in a workshop orienting the candidate to the program, to the instruments for evaluation, and to the methods and procedures used.

4. Orientation and Workshop of Part-Time, Off-Campus Evaluators

Prior to selection of participants for the first training workshop for off-campus support persons, a handbook was developed. This Handbook for Performance Evaluation of Part-Time, Off-Campus Instructors describes the duties and responsibilities of the evaluators; methods and procedures of the evaluation process; and the workshop agenda. Included in the handbook is a collection of readings for teaching improvement using different methods of instruction. Techniques of classroom observation and conferencing skills are also delineated. The handbook appendix displays six different types of evaluation instruments: evaluation of a lecture, a demonstration, a laboratory lesson, small group and large group discussion, and a skill activity. In Appendix B, evaluation forms used are displayed. Finally, a bibliography of formative evaluation literature is included for further reference.

A month prior to the scheduled orientation for participants, candidates were provided a packet of information about the program. These packets contained a copy of the handbook, objectives of the program, a Teaching Effectiveness Questionnaire, copies of evaluation instruments and the orientation and workshop programs. Providing candidates an opportunity to study these materials enabled them to come to the orientation program with questions of clarification and thus expedited the information process.

At the Orientation, participants were provided a flowsheet of the responsibilities of all parties to the new program: evaluators, evaluatees, and administration. (See flowsheet). A question and answer session with informal discussion followed the examination of the flowsheet.

The goal of the full-day workshop was to provide participants with those learning experiences that will facilitate their developing a high degree of skill in observing the instructor in the classroom, in utilizing evaluation instruments effectively and efficiently, and in conferencing with evaluatees in a positive, productive manner. In order to maximize learning, experiences were planned in which participants were actively involved. Lecturing by the facilitator was reduced to two mini-lectures of ten minutes each and to four summary statements.

A variety of teaching methods were used: small and large group discussion; modeling or demonstration with video cassette programs; mini-lecture with guided practice and feedback;

simulation; and role playing. Participants were directly involved in the learning process more than 90% of the scheduled time. Through videotapes of teaching performance, instructors learned to identify the factors of teaching effectiveness and to rate observed teacher behaviors. Effective conferencing techniques were demonstrated on videotape. Participants practiced conferencing techniques through role playing evaluator/evaluatee. The role playing activity was also taped for critiquing.

5. Program Implementation

Following the workshop, final plans for orienting the part-time, off-campus instructors to the support program were completed. Part-time, off-campus instructors were sent a packet of information explaining the purpose of the new program and the methods and procedures evaluators will use in observing evaluatees and in conferencing with them. The purpose of the part-time instructor orientation is to provide a forum for part-time instructors to receive clarification of questions they have regarding the new program. Part-time instructors will also have an opportunity to meet with the evaluator who will visit their classrooms during the academic year.

Visitation schedules were completed for the team evaluators and information provided them to facilitate the evaluation process. Included in the information are profiles of evaluatee's teaching experience and academic credentials, telephone numbers of evaluatees, etc. Evaluators will contact by telephone each evaluatee prior to the scheduled visitation.

6. Program Evaluation

The effectiveness of the new support program for part-time, off-campus instructors has been regularly assessed in terms of its utility in improving teaching performance of part-time, off-campus instructors. For the past five years, student evaluation data have been analyzed and reported for the three most recent academic years. Grand mean ratings of instructor overall effectiveness on student evaluations are compared with grand mean ratings by the professional evaluators to determine interior reliability of the observer ratings. Analysis of mean scores on each of the five factors of teaching effectiveness provides a data base for identification of areas of instructor strength and weakness and thus assist in the prioritizing of topics for part-time, off-campus professional development programs. Instructors' self-evaluations also indicate they perceive the support program as a positive influence in improving teaching effectiveness.

In the fall of 1989, the support program was extended to the evaluation and mentoring of adjunct faculty on campus.

Although part-time faculty on campus have been regularly evaluated by Associate Deans and the Dean of Transfer and Part-Time Instruction, it was felt that observation by trained evaluator/mentors within the academic discipline added another dimension to evaluation for teaching excellence. Information gathered thus far is positive and indicates the additional expenditure of institutional monies and professional time is warranted.

Lincoln Land Community College is pursuing its program to improve teaching effectiveness of its adjunct faculty in the spirit espoused by Tuckman and Tuckman (1981): "Part-timers are neither good nor bad for academe in their own right. Instead they are a diverse group with many different motives and goals. Whether we learn to employ them in a constructive manner will surely be one of the most fascinating questions of the '80s."

Likewise, in the 90s, the continued success of the college in fulfilling its goal, access with excellence, will be determined by the selection, evaluation, reward, and development of exceptional teachers in all aspects of its comprehensive mission.

A FLOWSHEET FOR THE EVALUATION OF PART-TIME, OFF-CAMPUS INSTRUCTORS

INSTRUCTOR/ EVALUATEE

Preparation

1. Submits a syllabus to the Dean of Part-Time Instruction
2. Prepares Instructional Objectives form for each class
3. Prepares class session

Conferences

Confers with evaluator following instruction

Outcome

Responds to evaluator's suggestions for teaching improvement.

Professional Development

Participates in orientation-in-service

EVALUATOR

Preparation

1. Prepares for six (6) observations each semester (minimum suggested)
2. Confers with the Dean of Part-Time Instruction to select evaluatees, gather needed information and materials
3. Communicates by telephone to evaluatees to identify available visitation dates

Observation

1. Examines evaluatee's instructional objectives; selects appropriate instrument for evaluating the lesson
2. Observes the instructor
3. Completes the evaluation form
4. Confers with evaluatee regarding observed teaching strengths and weaknesses and strategies for improvement

Reporting

1. Prepares summary report of evaluation.
2. Submits summary report and original of evaluation to Dean of Part-Time Instruction

Consulting

Makes himself/herself available by telephone to the evaluatee.

DEAN OF PART-TIME INSTRUCTION

Preparation

1. Conducts workshop for evaluators
2. Prepares observational schedule in cooperation with evaluators
3. Compiles needed supplies, materials, and information for evaluators

Processing

1. Processes evaluatee's reports
2. Analyzes evaluation data and reports findings annually

Support

Available to assist evaluators/evaluatees as needed

ON EXCELLENCE IN TEACHING

John E. Roueche and George A. Baker have published a three-part study of excellence in education. Part one of this report focuses on excellence in secondary education and provides a data base for the authors' examination of excellence at community, technical, and junior colleges. Miami-Dade Community College was selected for the case study evaluation. This college was selected by professors of community college education using four criteria related to excellence: situational leadership, systems for success, teaching excellence, and climate and culture. In reporting their findings, the following description of the exceptional teacher is given:

Although exceptional teachers demonstrate a consistent set of generic behaviors, the strength of those competencies varies significantly among individuals. Our descriptive categorical study of superior teachers documents that teachers find powerful motivation in their deep-felt motivation in their commitment in the goals they set for themselves and their students, and in the supportive attitude they bring to their teaching. They are able to integrate the students and their subject matter, and they feel good about the rewards that they receive from experiencing success with a student. They have refined their interpersonal skills to include an objective sense of fair play. They demonstrate an ability to listen and respond to students' needs. They desire to establish rapport with students, and they have an ability to demonstrate caring in warm, empathetic behaviors. Successful teachers also have well-developed intellectual skills. They value individualizing for personal accomplishment, they use effective teaching strategies, and they love learning and actively try to experiment with new ideas (Roueche and Baker 1986).

Few educators or students would challenge the validity of these general descriptions of effective teachers. The problem for this project, or for effectively evaluating teaching performance, for that matter, is to translate these qualitative descriptions into measurable teacher behaviors. When the evaluator is able to point out specific teacher behaviors indicating areas of teaching strength and weakness and, in a supportive environment, identify alternative strategies for improving teacher performance, the instructor is likely to be motivated to make change, in teaching methods and develop the skills necessary to improve teaching effectiveness.

CREATING A CLIMATE FOR LEARNING

Commenting on the topic of great teachers, what they are and what they are not, John E. Roueche remarked, "Genius in teaching is best demonstrated by exciting students to want to learn what the teacher has to teach. Expecting, demanding, and helping students achieve should be our personal and professional education goals!" The importance of creating a positive climate for learning is an educational cliché, but as with many truisms, the instructor's responsibility for creating a positive learning environment deserves a higher priority on the pedagogical agenda than it gets. To illustrate, thirty percent of all first-graders who begin the public school system never graduate from high school. Fifty percent of our students who enroll in universities and colleges never graduate. If high teacher expectations and a positive learning environment are variables in assuring student success, then it is fair to say we have not been successful in establishing this learning climate for a large number of persons.

Researchers using questionnaires with factor analysis of responses, interviews, etc. describe a positive learning atmosphere as one in which the teacher has expectations for student learning. The teacher is a caring person interested in student learning. Such a teacher does what is needed to assure student success. When teachers behave in these ways, students stay in the classes, learn more as measured by achievement tests, and sustain higher levels of motivation.

It is comforting to know, as well as reinforcing to teacher educators, that good teachers are not born with the attributes of teaching success; they become effective teachers by practicing, modifying their pedagogical skills, by continuously learning, and by sustaining their excitement for the course and their satisfaction in student achievement. Some of the techniques for establishing a positive learning climate are the following:

1. Know students by name. During the first class sessions, take time to learn their reasons for taking the course, their expectations, their career plans, etc.
2. Give each student your attention. It becomes easy to pay attention to the few who always seem prepared, interested, and willing to share their learning. Call on the silent student to get him/her involved, to provide evidence that the instructor is not ignoring that student. Students who feel ignored often become lazy and indifferent.

3. As much as possible, let students know you are available to them before and/or after class, by telephone, etc. Part-time instructors, particularly those off-campus, may have difficulty meeting with students other than at class sessions. Still, these instructors find ways to give individual attention within the constraints of time and place.
4. Give students feedback for learning. Hand back papers and tests as quickly as time permits. Make comments on papers indicating the positive as well as the negative aspects of student work. Plan strategies to talk with students individually about their progress to provide constructive feedback, to suggest help for students who are having difficulties and who are likely to drop out of class.

Students often react positively to instructors who call them about absence from class, who ask students to notify them when absence is necessary. Students interpret these practices as evidence that the teacher cares about their learning and is willing to go out of his/her way to show this concern. Communicating to students orally and in writing the first class session of the instructor's attendance policy establishes from the first that the instructor expects student performance and attaches importance to attendance and to student progress. An instructor's attitude of "anything goes" usually means students realize few significant learning outcomes.

EFFECTIVE CLASSROOM OBSERVATION TECHNIQUES

Experienced teachers know when they are teaching effectively. They are usually able to describe their strengths and weaknesses and to identify areas they would like to improve upon. Isolating ineffective teacher behaviors is sometimes difficult for the teacher because his/her attention in the classroom cannot be exclusively devoted to self analysis. To the contrary, the attention of the teacher must be divided among a number of activities, all going on simultaneously; none in slow motion. Because it is difficult for the instructor to gather data, and evaluate self performance, the trained classroom observer can provide this information and positively affect teacher performance, providing the proper atmosphere and structure for evaluation and observation is established.

The purpose of classroom observation by a trained observer is to improve teacher effectiveness. It is the function of the observer to provide the information, direction, and support to help the teacher do what s/he intends to do. In planning a successful classroom observation, the evaluator/observer starts off with a basic premise: almost without exception, the instructor at the college level is competent in the academic area s/he teaches and is an expert in the discipline. Most instructors at the community college have spent years accumulating knowledge in an academic institution and/or years learning and practicing the discipline s/he teaches. However, many instructors at the higher education level have little or no formal training in the art of teaching. Many learn to be successful teachers through trial and error and through interacting with colleagues within the discipline. Successful instructors on campus may act as mentors and provide informal supervision and guidance to beginners.

Part-time instructors on-site, however, have little opportunity to grow and develop in teaching effectiveness as a result of interaction with colleagues within the discipline. In fact, at a given site, there may be no one who teaches at that site on the evening a particular instructor's class is scheduled. Therefore, part-time instructors on-site are in great need of support services designed to help the instructor grow in teaching effectiveness.

Why Train to be an Evaluator

An honest question that might be asked by the evaluator is: "Why should a competent, experienced faculty person be invited to participate in a workshop providing training in classroom observation and evaluation?"

Everyday experience provides abundant information that proficiency as a performer does not guarantee success in teaching others how to perform effectively. To illustrate, few Olympic stars or college athletes become successful coaches. Seldom does the big league baseball player perform the role of coach with the same degree of success enjoyed as a performer. These observations do not seem so startling when one considers what happens when a skill is learned. At first the beginning student notes every movement s/he makes and executes the skill with only a semblance of the model. With practice following feedback and correction, the movements become smoother and more accurate until they become part of a habit routine. The accomplished pianist no longer has to think about correct fingering or the correct location of B flat, for instance. In fact, over time, it becomes difficult for the performer to recall all the steps in learning the skill or the moves that made proficiency a reality. Without taking time to consciously study the steps and basic skills of practice, it would be difficult for the practitioner to consciously identify them. So it is in the classroom. We need to be trained to observe the basic factors of effective teaching, to isolate important stimuli in the classroom and attend to them. To observe all behavior is to study nothing. Systematic classroom observation requires the skilled use of techniques and instrumentation to identify and record significant behaviors in the learning environment. Because the function of instruments for observation is to assist the observer in isolating significant behaviors related to effective teaching, it is important that the evaluator focus on these behaviors. It is also essential that each instrument be reliable, valid, and useful for this purpose.

What Kind of Data Should be Collected by the Classroom Observer?

Before the classroom observation is made, the instructor provides the observer a formative evaluation plan. The plan will supply the observer with such needed information as the objectives for the class session, how the instructor plans to achieve these objectives, what means will be used by the instructor in judging whether or not s/he has been successful. The observer also needs to know what students are expected to do to prepare for the class and what they will be doing during the class. A copy of the instructor's syllabus will provide the observer with information about what teaching/learning has preceded the lesson and will tell what is planned for future class sessions. With this information, the observer can evaluate how well the instructor is progressing toward planned objectives and goals.

The instrument selected for evaluating the instructor in the classroom focuses on behaviors related to teaching effectiveness. It will be noted that six different instruments are prepared for evaluating an instructor by a classroom observer. Choice of instrument will depend upon the teacher's selection of teacher methodology as indicated by the formative evaluation plan: demonstration, laboratory lesson, small group discussion, large group discussion, skill activity, lecture. It will also be noted that each instrument divides observational data into five parts: physical environment, classroom climate, planning and organization, question and answer techniques, and communication skills. Each area is weighted according to its importance to successful teaching using that mode of instruction.

Observers rate each item from strongly agree to strongly disagree on a five point scale. If the item does not apply a sixth category, d/a, is provided to indicate that eventuality. By tallying the rating form, the observer can identify specific strengths and weaknesses of the teacher's performance as well as produce an overall evaluation of teaching effectiveness for that class observation. Space is provided on the observation form for notes substantiating observation data.

To be effective observational data needs to be discussed with the instructor. In a supportive manner, the evaluator reports to the instructor his/her findings. S/He listens for and encourages instructor response. The observer may suggest materials for enriching the teaching experience or alternative methods for the instructor to try. At the conclusion of the conference, it is important that the observer summarize findings and conclusions so that salient points for teacher strength and weakness are clearly identified and strategies for improvement delineated. It is also important that the observer remind the instructor that a written summary report will be sent to him/her summarizing conference content and identifying teacher strengths and weaknesses. The instructor is encouraged to respond to the written report if s/he so desires and to mail the signed report to the Dean of Part-Time Instruction. A copy of the signed report will then be mailed to the instructor for his/her files. The report will also be filed with the associate dean and the Dean of Transfer and Part-Time Instruction.

Prior to the observation, the observer will review the student evaluation data and summary form on file. Although students are not reliable judges of the instructor's academic skill, the body of research indicates that they are excellent judges of how well they are taught. Students observe and respond to the instructor's teaching on a regular basis and have the advantage of more information than the

professional observer can gather in a single visitation. Multiple sources of information provide the best assurance that the instructor's evaluation is fair and unbiased.

In preparing to write the report of observation, the observer uses the evaluation data provided by the completed observation instrument together with the notes made during the observational period. In providing a total picture of effective teaching performance, the Elements of Effective Lesson Design provides a useful structural device (McGreal 1983).

First, does the data support the instructor's providing an effective anticipatory set? It is important that students are ready to learn at the onset of the class session. A common method of establishing mental readiness and getting students started as quickly as possible is to stage a review of previous class work. Another way to provide learning readiness is to combine anticipatory set and a second element of effective lesson design, the statement of objectives for the lesson. Students need to know where they are going as well as what they have learned in order to have a sense of continuity and direction. Without providing this continuity, many poor and average students will view each lesson as an isolated segment in the course process.

With appropriate verbal cues, the instructor can give students advanced notice of the learning direction: "What we are going to do tonight is" or

"You will recall that last Wednesday evening, we identified the causes of voter apathy"

The effective instructor also provides verbal cues identifying what is important in a sea of details, examples, etc.

"This idea is essential for understanding effective design, " might be an example.

"This is an important point."

The use of summary and review statements are other important teacher strategies that help students learn more effectively and retain better.

"Let's take a few minutes to recall what we have discussed," might be a verbal cue to reinforce important points and put them into logical order.

The term, input, describes the explanation stage in teaching. The teacher's actual strategy for presenting the concepts for study are implied by this term. Instructional input includes teacher explanations, examples, and the

particular method of presentation selected (demonstration, small group discussion, etc.)

Modeling implies that the teacher demonstrate the concepts introduced by illustrations, visuals, examples, personal anecdotes, scenarios, role playing, etc. Whatever methods and means are selected by the teacher, the criteria for effectiveness are appropriateness and clarity of presentation in defining and explaining the concept presented.

Item 6 on the lesson design model is checking for understanding, a critical phase in pedagogy that provides the teacher with feedback on how well teaching methods have taught the concept at hand. Checking for understanding signals what needs further clarification or reteaching. It is important that the instructor use strategies to check the level of understanding for the entire class, not just a few able students eager to let the instructor know what they have achieved. Several devices may be used for this purpose. Asking questions on various levels of difficulty and providing student feedback is one method. Another method is the pre-test post-test device. Students at the beginning of the lecture pre-test and at the end post-test to measure growth from the teaching. Another method might be using a discussion question at the conclusion. The instructor circulates and observes how progress is going and detects the level of student understanding. Written or oral reports following the discussion will provide more information.

Item 7 in the Elements of Effective Lesson Design is guided practice. Students are provided in class time to put into practice what has been introduced in class by lecture, demonstration, etc. In hands-on courses, such as typing, providing such guided practice is a relatively easy matter. Workbooks are available and manuals with practice exercises provide such practice activity. However, in some disciplines, materials for guided practice are not readily available and more creativity is demanded in choosing the effective mode for guided practice. For example, instruction in the techniques of effective speaking may suggest planning student speeches as a means of guided practice with feedback from the class and from the instructor. A communications instructor teaching a lesson on sentence variety may provide practice with feedback by following the lecture with a writing assignment practicing the skill taught. However, in a sociology class, for example, finding ways for students to practice theory and social problem-solving skills is not so readily suggested by the topic itself. Skills for solving family conflict might be taught in guided practice by role playing activities or by presenting the class with a written scenario and asking for effective ways for solving the problem illustrated.

An important teaching principle to remember is: never send home work that students have not already had an opportunity in class to demonstrate they have sufficient knowledge and information to perform satisfactorily. Learning incorrect methods is not only self-defeating but costly in terms of the time needed to unlearn incorrect materials and techniques and replace them with new learning.

Closure

Closure, item 8 on Model Elements of Effective Lesson Design, is nothing more than tying everything together. Such summarization should enable students to relate what has been learned to the learning objective stated at the beginning of the lesson. In the process of providing closure, the instructor reviews statements to provide the students with a concise statement of learning progress from the beginning of the lesson to the end. Such closure also gives a preview of what will be learned in the next lesson and how it flows naturally from the present one. Some statements that illustrate this teaching techniques are the following:

"Today we learned the causative factors related to the Great Depression. They were Next week will be devoted to the identification and critical analysis of governmental intervention in the economy to prevent such severe downturns in the economy."

Statements, such as these, take the mystery about what is being learned and why. It also points out the continuity of topics introduced and provides a logical framework for students to organize learning for long-term retention.

MOTIVATING STUDENTS

Teachers cannot depend upon high levels of student motivation. Without motivation, the inner drive that propels human beings into action, we would live passive, apathetic lives. Effective teachers are actively concerned with the level of motivation of every student. Although teachers of required classes often find students with high levels of motivation from the first day of class, many students' motivational levels await the discovery of a reason for active participation. Research tells us that students highly motivated in anticipation of a class are likely to maintain that level of motivation throughout the course. This is not to say, however, that regardless of the teacher's behavior, students are either motivated from the first day of class or they are relatively disinterested and lethargic throughout the course. To the contrary, research on motivation by Clegg (1979), Cashin (1978), Knowles (1978), and others indicates that the instructor's manner of relating to students and his/her level of pedagogical skill have a marked influence on the level of student learning.

The problem is this: how does the instructor motivate those students who have low levels of interest in the class or who are taking the course in silent protest because they are required to do so. Any change in the student's motivational level will require the instructor to identify the students' strengths and weaknesses as they relate to course goals and objectives. Information of individual student interests and needs may be obtained by asking students to introduce themselves to the class and to tell what they hope to learn and their reasons for taking the course. The instructor, as much as possible, will synchronize course objectives with individual student interests through individual projects or by enriching the course content with materials that meet the students' needs and address their individual interests.

Highly effective teachers can often be identified by their behavior that first class session. While the inexperienced or less successful instructor dismisses the class after roll has been taken and a syllabus passed out, the effective teacher utilizes the full class time to gather important data for motivating students to give their best efforts to learning. From the first, the effective teacher communicates to students his/her high expectations that students will give their best efforts to learning.

Unmotivated students may be identified by their behavior, if not by their open admissions of negativism or disinterest in the course.

1. Unmotivated students resist new information.

2. Unmotivated students tend to judge learning and learning activities as good or bad rather than on a continuum.
3. Unmotivated students resist change, even when new information seems to warrant it.

In Clegg's study (1979) of student motivation, she discovered that the variable most associated with high levels of motivation is the student's initial desire to take the course. The next five variables most often associated with high levels of student motivation describe the instructor's enthusiasm and expressiveness. Nevertheless, high levels of student motivation are not entirely related to the instructor's showmanship. Twelve other items strongly correlated with high levels of student motivation to learn are the following:

1. Teacher's ability to explain concepts clearly.
2. Teacher's communication to students of student success.
3. Teacher provides ample opportunity to participate in the learning process--in discussion, guided practice.
4. Ability to demonstrate the importance and significance of the subject matter in terms of student needs and career objectives.
5. Skill in demonstrating the sequential relatedness of course content.
6. Success in communicating the objectives of the course to students.
7. Use of appropriate humor.
8. Ability to stimulate student learning by discovery: students are asked to think and extrapolate as well as demonstrate factual information.
9. Skill in providing stimulating information exclusive of that provided by the textbook.
10. Habit of giving reasons for criticisms of students' performance.
11. Acknowledgment of student interests and his/her skill in capitalizing on these interests in the learning process.

12. Identification of students' strengths and weaknesses, through diagnostic tests or through writing assignments.

Some other techniques found related to increasing student interest in learning and motivating students to expend their best efforts are the following:

1. Involving students in choice of topics for projects when appropriate.
2. Providing alternative learning methods (varying teaching methods).
3. Testing students to let them know what has been learned, not just what they don't know.
4. Recognizing sincere student efforts, even when the product is not the greatest.
5. Helping students to set realistic goals.
6. Stimulating students to guess outcomes, to propose a theory to explain findings.
7. Stressing understanding more than factual learning.
8. Encouraging students' initiative by leaving gaps for students to fill in, by drawing attention to these gaps, and by explaining why the instructor is leaving them.
9. Avoiding excessive direction.
10. Helping students to evaluate their own progress.
11. Giving adequate feedback with correction.

Some conclusions about student motivation:

1. Motivation is a significant variable in students' readiness and willingness to learn.
2. Students are curious and do have a sincere desire to know and to understand.

3. Motivation can be capitalized upon if the learning situation provides for successful accomplishment at a fairly consistent rate.
4. Good teachers can do much to create an atmosphere where learning will be more efficient by stimulating student commitment and motivation.¹

¹ "Motivation to Learn"
Vol. VI, No. 8
Innovation Abstracts,
pp. 1-6

THE FEEDBACK LECTURE

To lecture or not to lecture. This is the question posed by many a college instructor. To paraphrase Shakespeare with even greater impunity--is it nobler in mind to utilize the lecture against the vast sea of student ignorance and inadequate preparation or to give up entirely and bow to inane class discussions in an exchange of mutual ignorance.

In recent years teacher educators have frowned upon the lecture as the cause of the eighth deadly sin, student boredom. The lecture has been condemned as the cause of student indifference to learning. Students chant a litany of grievances against the lecture: one-way communication, problems with notetaking, too fast or too slow pace, lack of student involvement, too much content, too little supporting concepts, and too few concrete examples, to name a few. The feedback lecture promises solutions to the problems of the deadly lecture. Popularized by Dean Osterman, Oregon State University; Mark Christensen, Oregon State University; Betty Coffey, Montana State University; and Christine A. Krygier, Oregon State University, the feedback lecture demonstrates how a well-planned lecture with certain critical innovations can appeal to the four basic types of learners and rescue the lecture from the dust bins of pedagogy.

How It Works

The feedback lecture features the following methods and procedures:

1. A study guide containing instructional objectives, a list of terms, visuals, and an introductory theme page.
2. An outline prepared by the teacher.
3. A twenty minute lecture the first half of the class session. Students take notes following the structure provided by the outline.
4. Student class discussion based on a question related to their preparatory reading assignment.
5. An in-class student writing assignment, a response to the discussion question.

6. Instructor feedback on appropriate written responses.
7. Part two of instructor's lecture.
8. Instructor asks students questions on various levels, factual and probing. Students are provided with additional feedback on the level of their learning.
9. Post lecture questions in the study guide to provide a bridge between lectures.

Research has identified four types of students according to their learning style: learners who prefer learning by discussion; learners who prefer lecture; learners who prefer demonstration and "how to: activities; learners who learn best through self-discovery (McCarthy 1981). In the feedback lecture, learners experience their preferred learning styles and have a chance to experience other types of learning as well. This strategy solves most of the problems associated with the lecture. The following outline, "Listening and Notetaking: A Study Guide," illustrates a plan for the feedback lecture:

**LISTENING AND NOTETAKING:
A Study Guide**

by Christine A. Krygier
Adult Education
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A. Procedures for This Unit

1. Read the introduction page.
2. Read the objectives so you will know what to look for in the lecture.
3. Write definitions for the terms listed on the objectives page.
4. Take the pre-test and check your answers.
5. Use the lecture outline for taking notes in lecture.
6. Enter into discussion during the discussion period and turn in a response sheet with name on it.

7. Check your response sheet with the feedback in your study guide.
8. Complete the post-test.
9. Begin to be aware of personal listening habits; notice how much is "tuned out."
10. Practice listening and notetaking skills during the lecture.
11. Analyze lectures from other classes as to their basic parts and reasoning paradigms, inductive or deductive. Apply notetaking skills to other class lectures.
12. Do assignments in preparation for the next lecture.

B. Introduction

Listening and Notetaking are key elements in developing good study skills. It is important to begin to listen carefully in order to discern relevant facts and information and to take an active part in learning. According to research we remember only about 10% of what we hear; hence the importance of writing down notes to remind us of the other 90%. This lecture will deal with listening and notetaking skills.

Prerequisite Reading Assignment
Systems for Study, Alton L. Raygor and David M. Wark, pp. 7-13

C. Objectives

General:

1. Students will be able to listen and take notes more effectively through application of the skills learned in this class.
2. Students will be able to explain the difference between hearing and listening.
3. Students will be able to recognize main points and write them down in a coherent manner together with supporting details.
4. Name and explain the two methods used for developing ideas or arguments.

5. List three signal words and explain their importance.
6. Identify the different kinds of clues which help you to understand an unorganized lecture.

Terminology:

Thesis
Inductive
Deductive
Irrelevancies
Signal or transition words

D. Pre-Test

1. Is there a difference between hearing and listening? What is the difference?
2. Name two methods of developing an idea or argument.
3. List three "clues" which help you decide importance lecture points to write down.
4. What is the purpose of a summary sentence or two for an entire lecture?

Answers:

1. Yes. Listening implies action on the part of the hearer. This action can be mental (thinking) or physical (reacting by writing down what is said).
2. Inductive method and deductive method.
3. Clues may include listing or numbering ideas, giving examples, or pauses.
4. Summarizing forces you to think about the material enough that you condense it. This practice helps you to retain the material and can help you to study for tests.

E. Lecture Outline

- I. Hearing v. Listening
 - A. Listening Implies Action
 - B. Active Listening
 - C. Listening Habits
 - D. Environment
 - E. Emotional Response

II. Organization of Lecture

- A. Introduction
- B. Thesis
- C. Body
- D. Summary/Closure
- E. Irrelevancies

III. The Unorganized Lecturer

- A. Visual Clues
- B. Vocal Clues
- C. Posture Clues

NOTES: Please pair up into two's at this point and begin your discussion. When completed, turn in your response and pick up discussion question feedback. You have eight minutes before the lecture begins again.

F. Discussion Questions

Each person will be given a short paragraph to read to one another. The listener must use/apply the concepts we have been discussing about active listening and identifying parts of the lecture.

1. Write down the main topic of the paragraph.
2. List one or two main ideas.
3. List any irrelevancies.
4. Tell whether the paragraph is developed inductively or deductively and why you chose the answer you did.

Paragraph #1 (These will be given out on separate sheets of paper to students.)

Competition in Ancient Greece

Life in ancient Greece centered around competition. There was active competition during the annual Panhellenic Games. (Pan meaning "all" and Hellenic referring to "things Greek." The games were held in a rotating basis in each of the four principal Greek cities. Since the games came to the city Olympia every fourth year, the practice of holding our modern Olympics every four years evolved.) Competition went beyond the games. Each city competed with the others for valuable trade with countries outside the Greek empire. A third area of competition centered round religion with each city competing to erect the largest and most beautiful temple. Even the classic Greek dramas

were subject to competition. Competing playwrights had their works performed at a yearly festival and the audience was allowed to choose the best play. Thus competition permeated life in ancient Greece influencing not only athletics, but also trade, religion, and the arts as well.

Paragraph #2

The Theory of Continental Drift

If you cut out the shapes of the continents from a map, they fit together into a single mass with amazing accuracy. Australia, home of the kangaroos and koala bears, fits snugly into a hole left by joining South America and Africa. Then too, scientists have found similar rocks and fossils on the Australian continent and on the southernmost tips of South America and Africa leading to still further speculation that the three continents were once joined. The other continents also fit together like parts of a giant jigsaw puzzle. Furthermore, scientists can prove that the Pacific Ocean is shrinking. All of this evidence supports the theory of Continental Drift which states that the seven continents were once joined, but broke apart and are now drifting on their own. The amazing fit of distant continents, similar rocks and creatures, and a smaller Pacific Ocean all suggest that this theory has some basis in fact.

G. Discussion Question Feedback

1. Printed list of main ideas
2. Questions for understanding
 - a. Life in ancient Greece centered around competition.
 - b. Each city competed with the others for valuable trade with countries outside the Greek empire.
 - c. A third area of competition centered around religion with each city competing to erect the largest and most beautiful temple.
 - d. Classical Greek dramas were also subject to competition.
 - e. Thus competition permeated life in ancient Greece influencing not only athletics, but trade, religion, and the arts.

3. Method of logical development
 - a. Inductive
 - b. Deductive

H. Lecture Outline (second half of lecture)

IV. Notetaking

- A. What is notetaking and why do it?
 1. Note is brief record written down to assist memory
 2. Remember only 10% of what we hear
- B. Posing and answering questions
- C. Tools
- D. Identification of class, date, etc.
- E. Use of abbreviations
- F. Writing tips
 1. Listen-think-write
 2. Listen for main idea
 3. Review notes and summarize
- G. Outlining for recording lecture or reviewing notes
- H. Summarizing whole lecture in two to three sentences

I. Post-Test

1. What are the concepts of active listening and how will you apply them to your other classes?
2. If a friend asks you how to take notes, what points do you consider would be most important to tell him/her?
3. List three signal or transitional words and tell why they are important.
4. Why, when, and how should you go over your class notes?

Answers:

1. Active listening requires that the listener be aware of three important things: the environment, his/her own role as a listener, and the manner in which the speaker is presenting his/her message.
2. Put in identification, use abbreviations, listen-think-write (summarize and condense), write down main ideas and some supporting detail.

3. "To begin with," "secondly," "in summary."
4. Review notes as soon after class as possible--clarify confusing abbreviations, correct words you can't read, note questions to ask the instructor. This helps you review and understand the lecture and will help you when you study for a test.

J. Cool-Down

The next lecture will cover effective reading and notetaking. Please read Lesson 9 in Systems for Study on making written notes before coming to class.

Examine the communication of one other person and work with him/her on his/her notetaking and listening skills. For ten extra points, describe your experience with this individual, particularly his/her entry and exit skills. Feel free to discuss this experience during the next class session.

K. Warm-Up

The next lecture will cover effective reading and notetaking. Please read Lesson 9 in Systems for Study on making notes before that time.

EFFECTIVE DISCUSSIONS

The discussion and the lecture are probably the most commonly utilized methods of instruction at the college level. Like the lecture, the discussion approach to teaching has its strengths and weaknesses. By utilizing intercommunication between teacher and students and among students themselves, it is possible for the instructor to learn a great deal about the depth of student learning and cognitive styles of student learning. It is also possible to use discussion to develop and sustain student interests, to change student opinions and values, and sensitize them to issues of human concern. Finally through discussion and active participation in the learning process, research indicates students are far more likely to learn effectively and efficiently and to sustain that learning longer periods of time.

On the other hand, experienced teachers know the pitfalls of the discussion process. First, discussion requires of the instructor much more extensive planning and preparation. Discussions are also more time consuming and may seem to take up too much class time for the amount of learning that appears to take place. Then, too, the instructor has less control over the learning environment. Talkative students may try to monopolize the discussion, and discussion may go off on a tangent, or wander in an unanticipated direction. Most of all, what every inexperienced instructor fears may occur: students might sit like zombies waiting for the teacher to do something.

There are techniques that can be used to keep discussion on target and to maximize learning outcomes. Choice of techniques used depend upon the learning outcomes and goals planned by the instructor: improving cognitive learning; stimulating effective learning or interest; or increasing participation of students in the learning process.

Cognitive Learning Objectives

When intellectual or cognitive learning is the primary objective of teaching, the instructor may maximize the discussion process by utilizing the following strategies:

1. Define the topic. Communicate to students clearly the topic for study. Students will be prepared for discussion class. Topics for discussion are more likely to catch fire also if they concern relevant issues rather than abstract or academic issues.

2. Prepare carefully for the discussion. Effective discussions probably require more preparation time of the instructor than the lecture. The instructor needs to anticipate all issues or questions that may be presented by students in the discussion. It is also advisable to prepare questions that will evoke discussion and to outline possible answers or responses.
3. Set the stage for the discussion by using first-hand experience, a case study, a scenario, personal anecdote, etc. The instructor may also help students to prepare for the discussion by assigning appropriate readings or by showing relevant films.
4. During the discussion, the instructor facilitates the discussion.
 - a. The instructor listens and attends to points students are making; the instructor also responds to the affective content of student input.
 - b. The instructor observes, that is, s/he pays attention to both content and process. S/He notes, for example, those who are responding and participating in the discussion and those who are silent.
 - c. The instructor tolerates silence and waits a reasonable amount of time for students to pick up on the discussion before interjecting his/her own opinions, etc.
 - d. The instructor clarifies by paraphrasing student comments, by summarizing, by pointing out important points or positions, by identifying appropriate solutions or good responses.
 - e. The instructor promotes student thinking and understanding by asking students to provide examples or illustrations to support their positions.
 - f. The instructor promotes student contributions by giving students positive feedback with both verbal and nonverbal reinforcement.
 - g. The instructor checks for consensus when appropriate.
 - h. The instructor provides closure by summarizing the content of the discussion.

- i. The instructor utilizes question and answer techniques to structure the discussion process and clarify thinking.
 - i. Asks students to clarify remarks, to support their opinions.
 - ii. Uses open-ended questions, rather than questions that may be answered with "yes" or "no."
 - iii. Uses divergent questions for which there is no single correct answer; for example, "What is your opinion of capital punishment?"
 - iv. Rephrases questions if students do not respond.
 - v. Provides control to the discussion process with the following techniques:
 1. Defines the problem.
 2. Asks students for possible solutions.
 3. Collects relevant data--elaborates.
 4. Evaluates data/solutions.
 5. Selects the best position/solutions.

Affective Learning Objectives

When the primary goal of the lesson is to change student attitudes or to examine social issues, the instructor may use the following strategies to assure a positive outcome to a discussion:

1. Know the students: their names, their interests, goals, career aspirations, their out-of-class lives.
2. Stimulate discussion without taking over the class.
3. In sensitive areas be careful of student feelings. Some students are not ready to reveal inner thoughts and feelings. Some students may be so sensitive to the topic that they respond with considerable verbal aggression and anger.
4. Do not question the same student for too long. It is seldom helpful to show the class how little a student knows about the topic.

willing to listen to it, s/he is more likely to be rewarded with answers.

2. It is also important to ask one question at a time, rather than a string of questions. The confusion that results from multiple questions discourages student response.
3. Reward students who respond by acknowledging their contributions. Encourage student to ask other students questions.
4. Use a variety of factual and probing questions. It is frequently effective to begin with factual information to provide a data base for questions requiring higher thinking processes.

Perhaps, most important, the instructor needs a question strategy that leads toward learning goals. Effective question and answer teaching structures the thinking process to more refined understanding. It becomes obvious, therefore, that questioning strategies are part of the planning process, planned ahead of the class session.

Tactics for Questioning

Beyond the consideration of question type, there are several tactics suggested by the current literature which may assist teachers in improving the use of questioning in their teaching.

1. After asking a question, wait for a response. Do not answer the question yourself. Repeat it, rephrase it, modify it, call on another student to answer it, or replace it with another question until you have waited at least three to five seconds. Students need time to think about the question and prepare their responses. The research indicates that with a wait-time of three to five seconds, students respond more, increase the length and number of their responses, use complex cognitive processes, and begin to ask more questions. Sometimes when teachers reword questions because they believe that the initial question is unclear, the result is greater student confusion. Students may not know what question to try to answer (See Moriber 1971).

5. Use your own experience, when appropriate, to show students your humanity and personal vulnerability.
6. Do not hasten to agree with student positions unless such agreement reflects honest convictions. Students are quick to discern intellectual dishonesty.
7. Deal with conflicts. Do not ignore them. Identify the areas of conflict. It may be appropriate to write the pros and cons on the board, or it may be effective for two sides to debate the issue.
8. In general, the role of the instructor in the discussion is to be an observer rather than a participant. Listen to the points students make. Ask them to clarify confused statements or to expand on comments, to explore an idea further. Paraphrase student remarks when appropriate. Be accepting, rather than judgmental. Identify positive student contributions rather than confine remarks to student inaccuracies, fallacious statements, or shaky opinions.

Getting Students to Participate

Nothing is more dull than a discussion that reduces to a two-way communication between the instructor and a voluble student. Nevertheless, lively discussions are not a chance occurrence; they are created by perceptive, alert instructors. Instructors who lead productive discussion have a sense of showmanship. They create the expectation of excitement. Arranging the seating for everyone, including the instructor, to see one another is a must. If students do not know one another, begin by having students interview another person. Then, have the interviewee introduce that person to a third person.

Other strategies to elicit participation are the following:

1. Explain the grading policy with respect to participation. Do this early and clearly.
2. Control excessive talkers by not calling on them first, but instead, by calling on the more passive students. Have a student in a small group be responsible for recording each student's contributions.

3. Help the group clarify goals. Keep the group on track, if necessary, by calling their attention to the fact they are straying from the topic.
4. Mediate and clarify differences in opinion.
5. Effect closure by drawing conclusions and by summarizing discussion content.

THE QUESTION

The greatest teachers on earth have used the question as a primary teaching tool. Aristotle used the question to structure and stimulate thinking: What is beauty? How do you know you exist?, questions that continue to provoke man's deepest and significant thought. In fact, Aristotle said, "To teach is to ask."

The question and answer is the instructor's most powerful teaching methodology. But there is a skill in developing this technique to stimulate real thinking and result in meaningful information.

Questions may be used to accomplish the following objectives:

1. To determine the level of the student's understanding of the concept, topic, etc.
2. To involve the student in the learning process through participation.
3. To test a student's knowledge and understanding and to probe the extent he can use new information learned to solve new problems.
4. To review, restate, and/or summarize fundamental points from previous sessions.
5. To provide a stimulus for discussion.
6. To keep students on task, to maintain student attention.

Utilizing the question and answer method of instruction effectively requires the following strategies:

1. After asking a question, the instructor needs to wait for a response. It is a temptation for the teacher to answer the question himself/herself if a student stumbles over the answer or seems hesitant to reply. Instead, try repeating or rephrasing the question, but wait at least five seconds for a student to reply. Students need time to think about the question and to prepare their responses. When the instructor communicates to students that s/he expects to receive a response and is

2. Ask only one question at a time. Do not ask a string of questions one after the other in the same utterance. For example, ask, "Compare the skeleton of an ape with that of a human." Do not ask, "How are apes and man alike? Are they alike in bone structure and/or family structure and/or places where they live?" A series of questions tends to confuse students. They are not able to determine just what the teacher is requesting from them. Napell (1978) states that videotape replays reveal an interesting pattern when the teacher asks a series of questions. "Hands will go up in response to the first question, and a few will go down during the second, and those hands remaining up gradually will get lower and lower as the instructor finally concludes with a question very different from the one for which the hands were initially raised."

Even if you believe that your question is unclear, wait for a response. You may find that students do indeed understand the question. By attempting to clarify you may change the meaning of the question, thereby adding to the confusion.

3. When student questions are desired, request them explicitly, wait, and then acknowledge student contributions. For example, a teacher may wish to solicit questions about the plays of Shakespeare which the class has been studying. Instructor might say, "Are there any questions or clarifications of points we have raised?" or "Please ask questions about either the main characters or the minor characters," or "In light of Sally's allusion to Lady Macbeth, I invite you to ask her some questions for clarification."

Indicate to students that questions are not a sign of stupidity but rather the manifestation of concern and thought about the topic. Be very careful not to subtly or even jokingly convey the message that a student is stupid for asking for a clarification or restatement of an idea already raised in class or in the text.

4. Use a variety of probing and explaining questions. Ask questions that require different approaches to the topic, such as the causal, teleological, functional, or

chronological questions given earlier. One way to begin is to avoid words "why" and "explain" and to phrase your questions with words which give stronger clues about the types of explanation sought. Thus, for a chronological explanation, instead of asking, "Why did we have a depression in the 1930s?", try, "What series of events led up to the stock market crash of 1929 and the high unemployment in the 1930s?"

A variety of probes can also be used to stimulate different cognitive processes. For example, suppose that a student in a sociology class has stated that the female's most important role in society is to be a mother. The teacher could probe that statement by asking, "Why do you say that?" However, it might be more stimulating to ask the student or the class as a whole, "If you were Betty Friedan, Gloria Steinem, or Simone de Beauvoir, how would you react to that statement?" or "What are the positive and negative consequences that arise within a family when a woman devotes herself chiefly to being a mother?" or "What actions would you expect the government to take if and when it incorporated your idea into its social and economic policy?"

Tactics for Fielding Student Responses

One natural outcome of teacher questioning is student responding. It is important to attend to students' responses. The ways in which the instructor fields student responses will influence future responses. There are many options open to the teacher after a student response and no pedagogical rule mandating a particular behavior on the teacher's part. Nevertheless, one needs not be a psychologist to realize that it is helpful to reinforce good responses. Students look to the instructor for guidance and support. If the instructor ignores them or shows virtual indifference, student behavior may be inhibited even if it is appropriate. Chastised students, and especially those who feel humiliated, may become so angry or fearful that they will refuse to respond in the future.

The goal, then, is for the instructor to field responses in such a way that the quantity and quality of future responses are enhanced. The following are several tactics for fielding responses. Please keep in mind that these

tactics do not indicate how to field all types of responses under all conditions.

1. Praise the student in a strong, positive way for a correct or excellent response. Use such terms as "excellent answer," "absolutely correct," and "bull's eye." These terms are quite different from the common mild phrases teacher often use such as "O.K.," "hm-hm," and "all right." Especially when the response is long, the teacher should try to find at least some part that deserves strong praise and then comment on it.
2. Make comments pertinent to the specific student response. For example, suppose a student has offered an excellent response to the question, "What function did the invasion serve for Argentina?" The instructor might say, "That was excellent, Pat. You included national political reasons as well as mentioning the Argentine psychological drive to become the South American leader." This response gives an excellent rating to the student in an explicit and strong form. It also demonstrates that the instructor has been listening carefully to the student's response by supplying comments specific to the student's ideas.
3. Make no comment at all after each specific response within a series of responses to a single question; make a general comment after the series of responses are complete. Suppose the teacher has asked the sequence of questions above on the Argentine invasion of the Falklands. Before asking the final question, the teacher could designate three students to respond. The teacher could then nod or point to each in turn to supply answers. After the third response the teacher might say, "Those were excellent answers; the first emphasized national political functions, while the second and third concentrated on the psychological factors for Argentina within South America and the world at large."

There are at least two good reasons for using this tactic to field multiple responses. First, the teacher's comments have the tendency to shift the focus of discourse back to the teacher. By nodding or pointing to the next student, the instructor keeps the

focus on the students' response. Second, and more important, if the instructor praises the first student immediately, the second student is likely to pick up the message that the teacher expects an answer similar to the first one. The second student will hesitate to go off on another track even though it may be a good one.

It is very important that the teacher keep track of the responses in the series so that they can be reinforced at the end. Fielding the responses in this way encourages each student's own particular response. It also helps students to learn that they do not need to have the teacher's comments after each of their responses.

4. Build on the student's response. If the instructor continues to discuss a point after a student response, s/he should try to incorporate the key elements of the response into the discussion. By using the student's response, the teacher shows that s/he values the points made. By referring to the student explicitly by name (e.g., "As Pat pointed out, the Falklands national political status ..."), the teacher gives credit where credit is due.
5. Avoid the "yes, but ..." response. Teachers use "Yes, but ..." or its equivalent when a response is wrong or at least partly wrong. The overall impact of these phrases is negative and deceptive even though the teacher's intent is probably positive. The "Yes, but ..." fielding move says the response is correct or appropriate with one breath and then takes away the praise with the next breath. Some straightforward alternatives can be recommended.
 - a. Wait to a count of five with the expectation that another student will volunteer a correct or better response.
 - b. Ask, "How did you arrive at the response?" (Be careful, however, not to ask this question only when you receive inadequate responses. Ask it also at times when you receive a perfectly good response.)
 - c. Say, "You're right regarding X and that's great; wrong regarding Y. Now we need to

correct Y so we can get everything correct."

- d. Say, "Thanks. Is there someone else who wants to respond to the question or comment on the response we've already heard?"

These four alternatives are obviously not adequate to fit all cases. Indeed, it is generally difficult to field wrong or partially wrong responses because students are sensitive to teacher criticism. However, with these four alternatives as examples, an instructor will probably be able to generate others as needed.

Tactics for Fielding Student Questions

Strange as it may seem, many college teachers are ill at ease when students ask them questions. For some reason they have not learned to field questions. Fielding is a broader concept than responding; responding to a question is but one fielding option. The skill of fielding student questions is vital for a teacher who wants students to think about the topics under study; one result of student thinking is student questioning.

If there are few student questions, it may be that students are not attending to the teacher's remarks and not thinking about the topic at hand. Alternatively, students may be afraid to ask questions because they think they will be put down. It is also possible that students do not ask questions because they believe that the teacher doesn't want them to ask questions. That is, the teacher somehow discourages students from asking questions. This discouragement is rarely explicit; few teachers actually say, "Don't ask me any questions." (They may say, "Hold your questions for a few minutes.") Generally, the discouragement is implicit. It comes from the negative way a teacher fields a student question. For example, "We discussed that issue yesterday," or "That question is not really on target." After one of these negative fielding moves a student may say, "I'll never ask another question in this class."

It is difficult to explain why teachers discourage student questions in this way. However, some tentative reasons can be offered. Teachers feel the need to be in control both of the content and the procedures in the classroom. They feel that they need to "cover" the established course content. Time is precious. There is never enough of it to cover the material. Thus, they

discourage student questions because the questions may lead them away from their material. Teachers also want to appear knowledgeable to their students. Student questions may embarrass the instructor who is unable to respond adequately. In short, instructors fear that they may lose control or lose face if students ask questions.

The potential for loss of control and loss of face is real. It surely is possible for a teacher to go off track and to appear to lack knowledge. However, it is also true that the fear of this happening is overdrawn and the probability for it to occur is low. The teacher must weight the advantages gained by permitting and encouraging questions against the need to maintain tight control in order to be sure to cover the material and to appear knowledgeable. (In this author's experience, the advantages of student questions far outweigh the risks.)

Some tactics for fielding student questions in a positive way are in order. Again, these tactics do not suit all cases. They are simply examples of the options available.

1. Praise the student for asking a question. For example, "Thanks for asking that," or "That's a good question," or "That's an insightful question that everyone can consider." These are simple reactions and yet few teachers reinforce students for asking questions. College students need this reinforcement because their previous experience has generally led them to the conclusion that student questions are not valued.
2. Answer the student's question directly as often as possible. Students ask questions because they legitimately seek a response. They do not ask questions, by and large, to be cute or disruptive. Moreover, they want a response from the teacher. Do not play games with the student by asking a question in return or by stalling. By responding directly the teacher indicates that the question is worthwhile.

Teachers often deflect questions to other students or to the class in general. Students generally want the teacher to respond directly. If the instructor wants to hear first what other students have to say, the "deflecting" move can be prefaced with something like, "After we hear what some students have to say, then I'll offer my answer, too," or "I'm asking Joe to respond

specifically since he is the expert on this particular topic. If you still want my response when Joe is finished, just let me know." In this way, the questioner is informed of the instructor's strategy and does not assume that the question is being avoided or discounted by the deflection to another student.

3. Let the student know if a question leads into a new area. If a student's question prompts an instructor to launch into a new topic, the plan should be indicated to the class. For example, "That's an excellent question; it deserves further exploration. To do so let's shift to topic X. I think you will see the response develop. If not, please ask again. Thanks." While this does not satisfy the student with an immediate and direct response, the teacher does indicate that the question is valued both explicitly through praise and implicitly by involving the student in the plans.

SUMMARY

The question-answer dyad in the college classroom is a critical teaching element. It is critical when the teacher is questioner and the student respondent, and it is especially so when the roles are reversed. To achieve the multiple purpose served by questions an instructor can (1) use a variety of different question types to stimulate the students' cognitive processes, (2) use appropriate tactics in asking questions, (3) formulate questioning strategies, and (4) field the students' responses positively. An instructor can promote student questioning by fielding questions in an encouraging, reinforcing manner. All of these suggestions can be helpful in making the student an active participant in classroom interaction and in stimulating student thinking.

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